

# British Columbia Organic Grower



The Principle of Health

Journal for the Certified Organic Associations of BC - Fall 2017

Volume 20, Issue 4 (\$5.00)

COABC, 202-3002 32 Ave, Vernon BC V1T 2L7  
Canadian Publications Mail Agreement #40047167

Program Administrator



**COABC**  
Certified Organic Associations of BC

# In This Issue

Editor's Note .....	3
COABC News Patch .....	4
Organic Stories: Eatmore Sprouts.....	8
Footnotes: Biomimicry .....	17
Ask an Expert: The Farmland Advantage .....	24
COABC Order Form .....	31



## From Seedling to Success

Get inspired by the story of Eatmore Sprouts. Carmen and Glenn Wakeling's passion for the organic movement is bound to move you!

*Page 8*

# Features

Therapeutic Horticulture .....	6
Environmental Farm Plan Program .....	12
Annual Clover Varieties for Organics .....	14
Co-operatives in Italy .....	16
Food Justice and Farm Internships .....	22
A DIY Approach to Cherry Fly .....	29



## Co-operatives in Italy

Abbotsford organic farmer Chris Bodnar just got back from Italy, where co-ops are thriving.

*Page 16*

## BC Organic Grower

is received by all members of organizations belonging to the Certified Organic Associations of British Columbia. BC Organic Grower is published quarterly by COABC.

Subscribe online at:  
[www.certifiedorganic.bc.ca](http://www.certifiedorganic.bc.ca)

Editor: Darcy Smith  
Designer: Moss Dance

We welcome letters to the Editor (300 words maximum) and articles (1000 words maximum). Letters to the Editor are published at the discretion of the editor, based on relevance and suitability.

### Letters & submissions:

[editor@certifiedorganic.bc.ca](mailto:editor@certifiedorganic.bc.ca)

### Advertising (rates & copy)

[bcogadvertising@certifiedorganic.bc.ca](mailto:bcogadvertising@certifiedorganic.bc.ca)

### Non-member subscriptions

(\$20/year plus GST) please contact:

COABC

202-3002 32nd Ave  
Vernon, BC, V1T 2L7

Phone: 250-260-4429

Fax: 250-260-4436

[office@certifiedorganic.bc.ca](mailto:office@certifiedorganic.bc.ca)

[www.certifiedorganic.bc.ca](http://www.certifiedorganic.bc.ca)

For general information or to contact your local Certification Body, call the office – or check our website:

[www.certifiedorganic.bc.ca](http://www.certifiedorganic.bc.ca)

**On the Cover:** Carmen and Glenn Wakeling, owner-operators of Eatmore Sprouts. Credit: Boomer Jerritt.

Unless otherwise credited, all photos property of the COABC or Creative Commons.

Products advertised in BC Organic Grower are not necessarily approved for use by organic farmers/processors. Please consult the permitted substance list, CAN/32.3.11 for guidance. Your CB has the final authority for approval of inputs.

# Editor's Note

By Darcy Smith

## Principle of Health

*Organic agriculture should sustain and enhance the health of soil, plants, animals, humans, and the planet as one and indivisible.*

Why do people choose organic? Some want healthy food for their families, while others want to protect the environment from synthetic pesticides. The conversation about organic food sometimes misses a concept to which organic farmers are deeply attuned: that the health of the urban dweller who has never stepped foot on a farm is intricately connected to the health of the humble, hard-working earthworm. Without healthy soil, plants, and animals, the health of humans—and of the planet itself—suffers. To quote COABC's Organic Manifesto, "I nurture healthy soil that grows healthy food that grows healthy people—who grow healthy communities!"



The farmers profiled in our Fall 2017 Organic Stories feature, Carmen and Glenn Wakeling of Eatmore Sprouts, know this intimately. In fact, that quote above originally read "I nurture healthy soil, that grows healthy food, that grows healthy people!" When we showed up on the first morning of filming, there was Carmen, suggesting we were missing the crucial connection between soil, food, people, and, of course, community. The Wakelings have been busy nurturing health holistically for decades, both on the farm and off—you can read about their journey on page 8.

We couldn't talk about health without offering you some tips on soil amendments, so turn to page 14 for an update on annual clover varieties. On page 16, we switch focus from the microscopic—soil nutrients—to global, as Chris Bodnar takes us on a tour of Italy's thriving agricultural co-operatives.

On page 19, Marjorie Harris' Footnotes from the Field column digs into the art and science of organic agriculture through Ecological Biomimicry—and encourages us to ask, "How would Mother Nature do it?"

Organic farmers seeking support for on-farm practices that reflect the principle of health can turn to page 12, where Emma Holmes shares information about the Environmental Farm Plan, and our Ask An Expert column (page 24), which features Farmland Advantage, a project

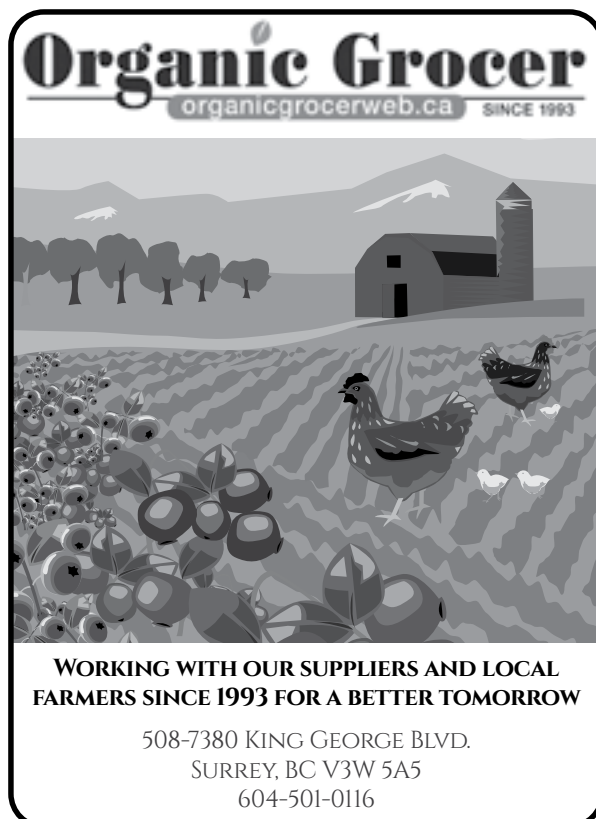
designed to help farmers identify the natural values on the farm that can be protected and enhanced.

On page 6, Earthwise Society introduces us to their therapeutic horticulture program—and to some of the people who have found deep satisfaction by getting their hands dirty. Charles Levkoe and Michael Ekers return on page 22 for the third installment of their series on unpaid farm labour. On page 29, we visit the Kootenays for a DIY—and pesticide free—approach to fighting Cherry Fly.

Our Organic Stories feature profiles members of the organic community each issue, from farmers to researchers to movers and shakers. Sometimes we seek out a profile that fits with our theme, as in this issue, though more often, the stories find us. If you'd like to see your farm featured, or you know of someone who should be in our pages, I'd love to hear from you. I'm always looking for story ideas and writers to help share all the wonderful things happening in the organic community. Reach out with your thoughts, letters, and story ideas to [editor@certifiedorganic.bc.ca](mailto:editor@certifiedorganic.bc.ca)—and be sure to visit us online at:

[bcorganicgrower.ca](http://bcorganicgrower.ca)

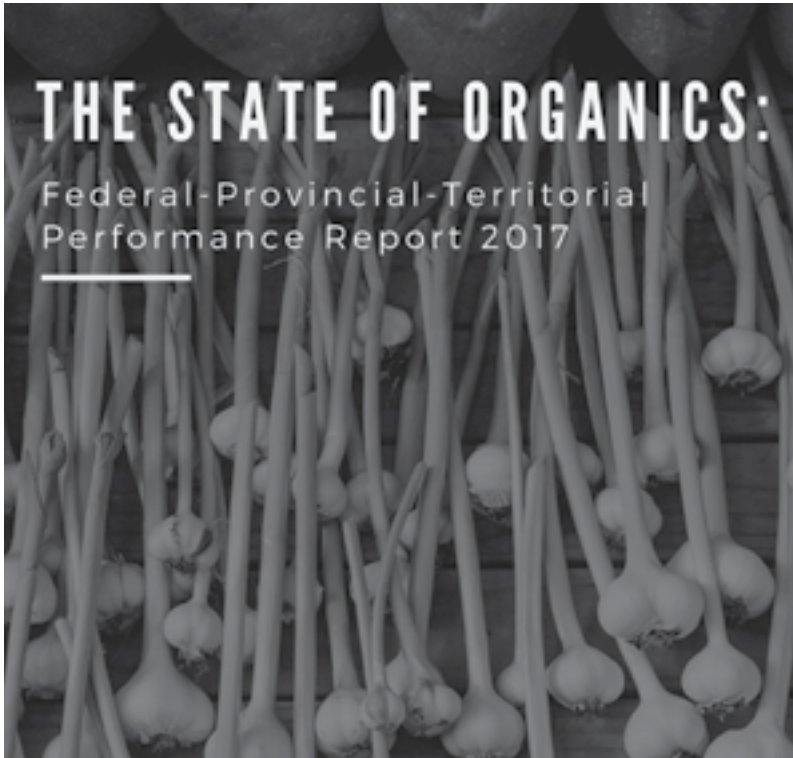
Happy harvest! 🌿



**Organic Grocer**  
organicgrocerweb.ca SINCE 1993

**WORKING WITH OUR SUPPLIERS AND LOCAL FARMERS SINCE 1993 FOR A BETTER TOMORROW**

508-7380 KING GEORGE BLVD.  
SURREY, BC V3W 5A5  
604-501-0116



ic sector in Canada,” said Tia Loftsgard, executive director of the Canada Organic Trade Association. “A consistent framework across Canada would create a level playing field for organic businesses to thrive and increase consumer confidence. We have been encouraged by the positive conversations with government leading up to this report.”

The Canada Organic Trade Association has three recommendations for government:

1. Ensure that all provinces and territories adopt organic regulations
2. Invest in expanded and improved organic data collection systems.
3. Increase organic policies and programs across jurisdictions.

## First Ever National Organic Sector Report

The State of Organics: Federal-Provincial-Territorial Performance Report 2017 analyzes the existing organic policy frameworks among Canada’s federal, provincial, and territorial governments—and highlights BC’s leadership role. As the first of its kind, the report is a benchmark, demonstrating the current state of affairs.

### The report highlights that:

- With one of the longer histories of organic production and consumption, B.C. has strong market supports and production supports for organic.
- The establishment of the B.C. organic logo has been a successful marketing campaign, having gained recognition province-wide.

- The B.C. Ministry of Agriculture has announced that the provincial organic standards will become mandatory in 2018, making B.C. the 5th province in the country to have provincial regulations.
- Organic data collection systems across the country are limited and inconsistently available; B.C. is currently developing a high functioning database to provide more accurate data on the B.C. organic sector thanks to Growing Forward 2 funding.

“B.C. is the strongest organic market in Canada, with 66% of consumers buying organic weekly,” says Jen Gamble, executive director of operations for the Certified Organic Associations of BC. “We are excited to continue working with the Ministry of Agriculture to build a strong organic sector that promotes consumer confidence and supports farmers and food producers.”

“Canadian consumers and businesses need to see more government support of the organ-

## BC Organic Sector Welcomes New Minister Of Agriculture

Saanich MLA Lana Popham has been named Minister of Agriculture—welcome, Lana! Popham, an organic farmer herself, has served as Opposition critic for agriculture since being elected in 2009, and has been a staunch supporter of BC’s flourishing organic sector. We offer congratulations to Minister Popham and look forward to continued positive collaboration with the Ministry of Agriculture.

Premier John Horgan has given Minister Popham a number of mandates, including revitalizing the Agriculture Land Reserve and the Agricultural Land Commission, increasing support for new farmers, and expanding local food production and markets.

Since 2012, the position of Minister of Agriculture has been

held by Liberal MLA Norm Letnick. Under Minister Letnick, we have seen the introduction of mandatory organic regulations that will increase consumer confidence in organic, and increased support for BC's growing organic sector.

"It has been a pleasure working with Norm. We are thankful for his willingness to begin the transition to mandatory organic in our province," says COABC President Carmen Wake-ling. "We are looking forward to working with Lana to complete this transition and to see where else there are opportunities for collaboration. We are excited that Lana has direct experience with organic production and principles."

---

## COABC Strategic Planning Session

Each year, the COABC board meets in November for a planning session. This year, the board and sector representatives will be focused on developing a five year strategic plan for the COABC and BC's organic sector. The session is sure to be ripe with vision and ideas for the future of organics in BC, and we look forward to sharing the results with COABC members.

In advance of the November meeting, the COABC will distribute a survey to members to gather feedback for planning session. We will be seeking your input about needs and direction for the next five years. Please keep an eye out for the survey and be sure to take the time to complete it—your participation is important and we want your voices to help shape the direction of BC's organic sector!

## National Organic Week

September 16-24, 2017

Organic Week—the largest annual celebration of organic food, farming, and products across the country—is almost here! Look for farmer profiles and more through our social media and stay tuned to our website ([certifiedorganic.bc.ca](http://certifiedorganic.bc.ca)) for up-to-date info about COABC events for producers.

If you'd like to host an Organic Week event, check out the Organic Week website for inspiration. Find events near you, and list yours on the map at

[organicweek.ca](http://organicweek.ca).

---

## Save the Date!

Sometimes it feels like it was just yesterday that we gathered in Nanaimo to learn and network at our annual conference—but #COABC2018 is already just around the corner!

**Date:** February 23-25, 2017

**Location:** Quality Hotel Abbotsford

Are you subscribed to our events mailing list? Please sign up now to receive updates about our annual conference:

[eepurl.com/coU0lz](http://eepurl.com/coU0lz)

---

## Young Agrarians Land Forums

Land access is one of the top challenges for new farmers in Southern BC. This winter, Young Agrarians (YA) will bring togeth-

er land owners and land seekers on Vancouver Island and in the South Okanagan for one day Land Forums. Join YA for a day of networking and education on land leasing, land trusting, and more! Details TBD—keep an eye out for updates at [youngagrarians.org/events](http://youngagrarians.org/events), and sign up for the YA e-newsletter on our homepage.

[youngagrarians.org](http://youngagrarians.org)


---

## A Heartfelt Thank You

There is change afoot in the COABC office. Eva-Lena Lang, who has been working with us as our Administrative Assistant since the summer of 2015, will be pursuing a Master's degree. Though we'll miss her, we couldn't be happier to see her engage with higher learning.

In her time at COABC, Eva-Lena has been instrumental in keeping things running smoothly. She's produced excellent Organic Roadshow offerings, communicated with you all each month through our E-News, and been busy working behind the scenes and with our membership. We've all enjoyed working with Eva-Lena, and look forward to hopefully collaborating with her again in the future. Best of luck on the next chapter, Eva-Lena!

On a related note, let's welcome Juanita Miller, who will be joining COABC as our new Administrative Assistant. Juanita comes to us with experience in the world of holistic nutrition that she is eager to apply to BC's organic sector.

Juanita says, "My philosophy is to know your local farmer and how your food is grown." We look forward to working with Juanita! 

# Therapeutic Horticulture Finding Balance on the Farm



*Sue (far right) in her role as a Therapeutic Horticulture Mentor at Earthwise Farm. Credit: Earthwise Society*

By Cait Murphy

It's early on a Friday morning and Matthew and his mother Ali have just spent 30 minutes driving to Tsawwassen.

They drive this way every week for an opportunity that Ali has described as life-changing.

The opportunity? Farmwork.

Taller than any of the staff he works with, it would be easy to assume that Matthew was older than 13 if you didn't see him running from place to place or kneeling down excitedly after spotting a friendly earthworm. An avid reader and budding scientist, he first visited the Earthwise Garden & Farm after hearing about the barn owls onsite.

Soon after he started volunteering on the farm with Organic Grower & Educator Isabelle Rodé, Matthew realized he was getting a lot out of farming. "When I started volunteering at Earthwise I was only working three hours on a Friday. Over time I have started doing over six hours every Friday," he says. "It has really improved my confidence, my teamwork skills, and my knowledge of farming."

Earthwise Society is a charity based in Delta and Agassiz with a mission to cultivate sustainable communities. Utilizing a public educational garden and organic urban and

rural farms, the Society undertakes food security, education, and therapeutic horticulture programs for surrounding communities.

One of the most important aspects of the farm for him, Matthew confides, is that the work is repetitive and allows volunteers to enter a state of meditation. "If you don't make noise, you can always hear non-manmade things like the birds. It isn't silent but you would describe it as a type of silence."

Humans have evolved to depend on nature for every aspect of our survival. Despite this, for many our busy lives do not include time to appreciate and reconnect with the world around us. Therapeutic horticulture is being used by Earthwise Society and many others to mend this gap. Therapeutic horticulture is a field that uses interaction with plants to increase an individual's well-being, and connects us to this elemental part of our lives, histories, and futures.

Earthwise Society incorporates therapeutic horticulture into all of its volunteer programs, and has designed targeted programs specifically for seniors, with the belief that everyone can take a little something away from interaction with nature. The interaction can be as simple as sitting outside and observing the garden, or it can be more active, such as weeding, planting, and harvesting.

This is where farming comes in. Farms that provide a therapeutic horticulture element have been shown to have positive impacts for workers, both mentally and socially. Participants with depression who found that drugs didn't work for them reported in one study that farmwork lessened the severity of their depression<sup>1</sup>. In other studies, farmwork was linked to reduced feelings of anxiety and an increased ability and tendency to interact socially<sup>2</sup>. There have been studies linking reduced severity of schizophrenia<sup>1</sup>, improved cognitive functioning in individuals with dementia<sup>2</sup>, and increased attention capacity<sup>3</sup> to farming as well.

Fascination with the natural world is one of the elements that researchers believe can make working on farms so positive<sup>3</sup>. Sue, a volunteer with Earthwise Society for nine years, certainly feels this fascination. "I'm so curious and I like to learn something new every day," the retired teacher says. "If you stay still for 60 seconds [at Earthwise] you notice it all—swallows, bees, rabbits, hummingbirds, herons."

While Matthew seems old for his age, Sue's mischievous eyes and ready laugh hint at her inner youthfulness. She volunteers in the Earthwise Garden, which is a haven for the host of bees, hoverflies, wasps, and hummingbirds that pollinate the Earthwise organic farming areas. The Garden has a diversity of perennial plants, bushes, and trees that also provide habitat for birds that prey on farm insect foes and allow the farming areas to flourish.

Two years ago, Sue became a Therapeutic Horticulture Mentor at Earthwise. There are a number of reasons that she thinks working socially with plants in the garden can ease a person's mind. "The act of weeding with someone, where you're not looking at the person's eyes, and have no need for expressions—you get to just unload," she explains. She says that having these moments away from regular day-to-day commitments is an important break for volunteers.

Both Matthew and Sue—student and teacher—have received benefits from their hands-on plant work. They've seen the benefits of therapeutic horticulture for others at Earthwise, as well, with Sue observing that volunteers have a "sense of satisfaction from seeing the work they've done, especially the teamwork."

There are many ways that organic agriculture protects health. It is more likely to shield our environment from overuse, to guard against chemicals that could unbalance it, and to protect our own physical health.

Therapeutic horticulture, with its aim to increase well-being through interaction with plants, easily embraces the goals of organic growing. Using therapeutic horticulture,



organic growing areas can benefit the community by supporting individual growth, improving mental health, promoting happiness—and encouraging us all to hear the many sounds in nature's silence. 🌱

*Cait Murphy is the Communications Coordinator at Earthwise Society. A settler in Coast Salish territory, she has a large organic garden and is thrilled to cook up this year's broad beans in her new favourite recipe, baghali polo.*

#### References

<sup>1</sup>Sorana, C., Iancu, A. W., Hoogendoorn, M.B., et al. (2015). Farm-based interventions for people with mental disorders: a systematic review of literature. *Disability and Rehabilitation*, Vol. 37, Iss. 5.

<sup>2</sup>Else, H., Bragg, R., Elings, M., et al. (2014). Understanding the impacts of care farms on health and well-being of disadvantaged populations: a protocol of the Evaluating Community Orders (ECO) pilot study. *BMJ, Open* 2014;4:e006536. doi:10.1136/bmjopen-2014-006536

<sup>3</sup>Pedersen, I., Patil, G., Berget, B., Ihlebæk, C., Gonzalez, M. T., (2016). Mental health rehabilitation in a care farm context: A descriptive review of Norwegian intervention studies. IOS Press, <http://content.iospress.com/download/work/wor2213?id=work%2Fwor2213>



# EATMORE SPROUTS



*Clockwise from top: the Eatmore staff team, pea shoot salad, washing sunflower shoots, display at the Comox Valley Farmers' Market. Credit: Pamela Powell*



## From Seedling to Success Story

By Moss Dance

If you've ever bought a box of sprouts in BC, it's highly likely that they were grown at Eatmore Sprouts in K'ómoks Territory, on Vancouver Island (Courtenay, BC). Behind that delicious package of sprouts, there is a story of earth-conscious principles, community, and dedication to the organic movement. The story of Eatmore Sprouts is like the life of a germinating seed—but also a lot like the story of *The Little Engine That Could*.

Carmen Wakeling, co-owner and operator of Eatmore Sprouts, got an early start in growing food. Growing up in the Comox Valley, she says her Mom was an avid gardener, cultivating a garden that supplied the family's table. At age 15, Carmen started working at Eatmore

Sprouts—at the time, it was just “the farm down the road” to her.

Founded in 1975, Eatmore Sprouts was a market garden and a small sprout operation in the early days. Carmen received a lot of mentoring in the garden. The farmer “was a phenomenal grower,” she recalls. “He used French intensive methods, and made his own compost, and I was just amazed you could do all of that.”

Carmen worked at Eatmore Sprouts each summer throughout her teenaged years, and met and married her husband, Glenn, when she was 19 years old. Glenn Wakeling grew up on a conventional hill country farm on the





“People are so innovative and creative, and they’ve had to be business people beyond business people, because they’ve had to stand up in community, and also make room for themselves in the business world.”



*The wood gasification heater at Eatmore Sprouts keeps the pea and sunflower houses toasty all winter. Credit: Pamela Powell*

North Island of New Zealand. Carmen remembers how he moved to Canada and saw this ecologically-friendly way of producing food, and was quickly convinced of the benefit of organic principles.

Soon after their marriage, Carmen and Glenn had the opportunity to purchase the Eatmore Sprouts business. They had bought a home in Oyster River a year before hand, just north of Courtenay, and moved the operation to their newly acquired half acre and greenhouse. Glenn was building and Carmen was a nursing student, so both worked part time with the sprouts. Eatmore Sprouts began to germinate in their backyard.

In the early days, Carmen and Glenn worked with incredible drive. They were producing enough product to deliver to Courtenay, Comox, Campbell River, and Nanaimo weekly. They also hired four part-time employees who came in to pack sprouts for shipping. They were so busy, they barely had time to think. “We didn’t have business background, but then we began to pay attention to money,” Carmen laughs, “because we were wondering, why is there no money?”

“We started to realize it was financially unstable because of the size and the scale of the operation.” says Carmen, so they dropped some product samples off at the Thrifty Foods grocery store in Nanaimo. “Alex Campbell Jr. called us the next day and said they wanted to carry our product in all of the stores on Vancouver Island—this was a big breakthrough for us.”

Interest from a major retailer shifted things substantially for the Wakelings. “We went from part-time growing out of the back shed to a full-time sprout operation,” Carmen says. “I made a decision to stop nursing school because I realized the healthy food we were producing had a far more long term and big impact potential for the people that we were feeding.” Scaling up, they were starting to see the financial benefit of the operation. Soon enough, they realized that they were beyond capacity with the facilities they had available.

At this point, the Wakelings were producing enough to supply all of the Thrifty Foods stores on Vancouver Island plus their existing markets on a half acre lot in a rural neighbourhood. Carmen laughs about the trucks coming in and out at midnight to pick up and drop off. They realized their little sprout of an operation needed to

N.O.O.A

Farm Certification  
\$425

Certifier of choice for small/medium scale operations throughout BC

**Benefits:** ~Simple Application forms  
~Lowest fees with Peer Review  
~Mentoring, Seminars, Farm Visits  
~Flexible, Friendly organization

Contact: Cara 250-540-2557 northorganics@gmail.com

*Solar panels on the roof of the sprouting facility.  
Credit: Pamela Powell.*



be transplanted to a new facility. They approached a local farmer who had been producing bean sprouts for them to distribute, and they agreed to partner and purchase land together where they could build a bigger facility. They chose their current location on Grieve Rd in Courtenay because it had excellent water, and highway access in an area that was agricultural and business-friendly.

After the move, the Wakelings' family grew, and as a mother of two young children, Carmen focused her energy on producing special events, and delved into learning more about food safety. In the new facility, they were amazed at all the space they had available—but within two years they were busting at the seams again! They built additions and entered into wider distribution networks, and demand skyrocketed.

It's an incredible story of exponential growth—Eatmore Sprouts started on half an acre with four employees, and they now operate on a 3.75 acre farm and lease seven acres from a neighbour. Their operation boasts a state-of-the-art ecological sprouting facility and a two acre market garden. They are also one of the larger agricultural employers in the Comox Valley with around 40 year-round employees.

Business was booming, and the Wakelings had learned through the school of hard knocks about all aspects of the operation, including logistics management, distribution, food safety, and strategic planning. That's when they decided to restructure the partnership—Carmen and Glenn purchased the business from their partners. It was a huge risk, but the Wakelings had a vision and they wanted to pursue their passion for creating the business in a way that deeply reflected their values.

Carmen says, “We realized that we were sprout producers, we were not distributors, we were not logistics managers, we wanted to grow sprouts and create healthy community. Every year, we learn more. The whole thing is still really exciting to me as I get to learn something new every day.”

## Ecological Footprint

When asked about Eatmore's natural wastewater treatment system, wood gasification heater for the pea and sunflower houses, and about their commitment to lowering their ecological footprint, Carmen says, “We're always talking about it, and we're always trying to do better, especially Glenn, and my son Robin—they are very focused on this aspect of the business.”

“We own this property, and that makes a big difference, because we can make those deep investments that will be impactful ecologically and financially.” The Wakelings regularly look at the return on investment for each sustainable technology or adaptation they implement on their operation, to ensure that they make financial sense.

“We don't always take into account the amount of maintenance the technology will require,” says Carmen. For example, the wood gasification heater for the pea and sunflower greenhouses means that Glenn is constantly on the hunt for firewood in the summer, and is schlepping wood every day in the winter to keep those greenhouses heated.

A recent carbon assessment reported that Eatmore Sprouts was “inches away from being carbon neutral,” and that the business would soon be eligible to sell carbon credits back—all they had to do was transition to renewable natural gas, so they did. Carmen would like to go further: “We still use plastic packaging, which none of us like, and we are always searching for alternatives. Our packaging is recycled, and it's recyclable, and it's made in Vancouver, so it's the best we can get—but it's not ideal.”

“There are parts of this operation that still drive us crazy—bureaucracy continues and paper work is never ending,” she continues, “but we try to do everything we can to mitigate those issues. We extract heat out of our processing wastewater which we use to then heat our facility through heat pumps. We are doing everything we can, and we know that we can always do better. We always challenge ourselves to look for better ways to do things sustainably. We want to be the kind of business that shows that change can happen.”

## Germinating Organics

The Eatmore Sprouts story has been evolving as the organic movement grows—step by step, the Wakelings

have been engaged in the development of standards and the growth of the community for decades.

There was no formal organic movement that they knew about when they first started, but the Wakelings had read about organic farming and principles, and had mentors who were composting, regenerating the soil, and role modelling ecological growing practices. From the beginning, Carmen was firm about her desire to farm without chemical inputs. She feels lucky that in her early agricultural education she learned about composting and healthy soil instead of how to apply chemical fertilizers and pesticides.

While the operation was fairly simple to manage ecologically at the time, Carmen admits that “the hardest thing was that there was no standard to follow.” So when they became aware of the BC organic program, they certified in 1994, and ended up helping to develop the standards for sprouting. Now there is a national standard on sprouting, and the Wakelings contributed a lot to that.

In 1999, the CFIA started to turn its attention to the sprouting industry, and the Wakelings stepped up again, building relationships and helping to develop the food safety standards for organic sprouting operations. The main issue at stake was seed sanitizer recommendations: “at the time, the standard was to apply 20ppm of chlorine to sterilize the seed,” Carmen remembers. “In the U.S., to this day, that is still the only standard that they have for sprout production.” So Carmen got on board with the the International Sprout Growers Association (she’s now the president) and she is advocating for organic sprout growers south of the border to create more organic-friendly standards with the FDA.

## Early Days for Organics

Carmen remembers an early Organic Conference in 1998 with the COABC. “We organized a conference for 150-200 organic producers at Tigh-Na-Mara in Parksville on a shoestring budget,” she remembers. “I made platters and platters of lasagne and I baked them in the ovens in the cabins of participants, and we all ate together in the biggest room we had available, just to save money!”

“The willingness to give and share with each other—all these people were showing up and feeding each other and I thought, wow, this is a powerful community.” When Carmen saw Mary Forstbauer’s ‘Checkmark Dance’ she realized, “these are my people—organic producers are fighters, they’ve had to fight for everything. Their communities thought they were just a bunch of hippies and a bit weird. It was all very grassroots, and it still is very grassroots.”

“Whenever I had a chance to contribute something to the COABC community, I would. I was on the standards review committee for ages, and I got to do the SRC for aquaculture. I got to know so many great people. I always want to contribute however I can to the COABC.” Carmen laughs, “Funnily, now, I’m considered an elder.” Even


though she’s far from typical retirement age, Carmen’s experience and knowledge are so extensive, this makes sense. “Right now I’m in this role as president of the organization—but I feel like my main role is as a bridge person.”

“There’s so much brilliance and intelligence amongst the people in the organic sector,” Carmen says. “People are so innovative and creative, and they’ve had to be business people beyond business people, because they’ve had to stand up in community, and also make room for themselves in the business world. Now, it’s a matter of trying to encourage and engage the youth so we can start to plan for succession in the organization. And there are so many people coming on board and it’s just so great to see that happening.”

“There is such amazing energy in this sector. And it’s interesting because you hear that the agriculture sector is not having people show up. Of course, we are not perfect yet. We have not spent enough time on financial sustainability in this sector, we tend to focus more on sustainability of the planet, and community, but we forget that financial piece sometimes.”

Carmen worries about the challenges facing new farmers now: “There are a lot of challenges associated with trying to get into the food game at this stage. I look at what we’ve done and I don’t know if we could have repeated the experience now, because of the cost of everything. It makes me really concerned, and it makes me really value the work that Young Agrarians are doing to link land and farmers and to bring people a level of business acumen so that the people who are showing up really understand what they are getting into.”

“The coolest part about this generational shift that’s happening,” Carmen says, “is that people are seeing collaboration is essential. It takes a team to climb Mt. Everest. That’s where I see so much hope and benefit for the organic sector and the planet—that younger people are seeing the importance of this.”

“I’m getting older, and I want to eat really well when I’m old. So now I’m thinking about getting farmers on farms, and supporting them to be financially viable.” 

 [www.eatmoresprouts.com](http://www.eatmoresprouts.com)

*Moss Dance is an organic farmer on the search for a new farm in Quw’utsun & WSÁNEĆ Territories (Salt Spring Island), and works with the BC Organic Grower as layout editor. She spent the last decade farming and organizing in K’ómoks Territory, and even got to work at Eatmore Sprouts for awhile!*

# STEWARDING THE LAND WITH THE ENVIRONMENTAL FARM PLAN



*Garlic field. Credit: Moss Dance*

*By Emma Holmes*

The Environmental Farm Plan (EFP) is a no-charge, voluntary, and confidential program in which producers receive one-on-one support from a qualified Planning Advisor to highlight their farm’s environmental strengths, identify potential risks, and set realistic action plans to improve environmental stewardship. It also supports farmers in taking advantage of tools, techniques, and funding to manage those risks.

The program applies to all types and sizes of farm operations in the province. Developing an Environmental Farm Plan (EFP) is a strong tool towards ensuring the sustainability and resiliency of your farm operation.

The first stage of the program involves conducting a farm evaluation with a Planning Advisor. The evaluation includes a farm walk about and completion of the EFP workbook, which consists of two parts – Farm Review and Action Plan.

The Farm Review Worksheets will provide you with:

- an understanding of current government regulations relevant to your farming operation
- tools to help you assess the impact of your farming practices on the environment
- risk assessment questions that help you pinpoint any areas of concern or opportunities for improvement



*Emma Holmes*

Based on the results of your Farm Review Worksheets, your Planning Advisor will work with you to develop an Action Plan that will:

- help you set realistic goals to protect and enhance the environment
- improve your response to environmental incidents through contingency planning
- prioritize goals and set realistic timelines to achieve them

Once you've completed the Farm Review Worksheets, developed the Action Plan, and you and your Planning Advisor have both signed the Statement of Completion, you will have completed the EFP.

In recognition of their efforts to manage land in an environmentally sustainable manner, producers who complete the EFP Program may be eligible to apply for cost-shared incentives through the Beneficial Management Practices (BMP) Program to implement actions identified in their on-farm environmental action plan.

The EFP designation is trusted by the public, who are increasingly supporting farms that are environmentally responsible, and thus a completed EFP provides enhanced marketing opportunities.

The EFP process is completely voluntary and you may proceed as far as you wish. All of the priorities developed by you and your Planning Advisor will belong solely to you. It is your choice to implement all, some, or none of the priority actions.

Confidentiality is a fundamental component of the program. The EFP process provides producers with information and support in meeting environmental regulations. It is not an enforcement program. The Farm Review and the Action Plan will belong only to you; your Planning Advisor will not share any details of your farm plan with anyone else, including government organizations or other farmers.


Thousands of farmers in BC have participated in the program and have found it valuable. They have utilized the support offered through the program to make important improvements to their operations that minimize environmental risks. Many producers have also appreciated the enhanced public trust and marketing opportunities associated with the program.

For more information and to work with an EFP planner, please reach out to a contact in your region:

Melanie Dyson, Vancouver Island:  
[melanieadyson@gmail.com](mailto:melanieadyson@gmail.com)

Kiara Jack, Metro Vancouver and Lower Fraser Valley  
[kiaramajack@gmail.com](mailto:kiaramajack@gmail.com)

Rachael Roussin, Rossland and surrounding regions  
[rachael.roussin@gmail.com](mailto:rachael.roussin@gmail.com)

Marjolaine Dessure, Pemberton and surrounding regions  
[marjo@escrop.com](mailto:marjo@escrop.com) 

*Emma Holmes has a B.Sc in Sustainable Agriculture and M.Sc in Soil Science, both from UBC. She farmed on Orcas Island and Salt Spring Island and is now the New Entrant Agrologist at the BC Ministry of Agriculture.*



# ANNUAL CLOVER VARIETIES

## Suitable for Organic Production Systems



By Saikat Kumar Basu

Clover is the common English name for different species of plants belonging to the genus *Trifolium* comprising over 250+ species distributed across the planet. These are legume plants that belong to the plant family Leguminaceae (Fabaceae) indicating these are plants capable of successfully fixing atmospheric nitrogen. Clover is commonly used as a pasture and/or forage crop and is usually highly palatable and nutritious for the standing livestock. Annual, biennial, and perennial species of clovers are reported across the planet and are treated as an important legume forage crop. Clovers are also called trefoil. Wild clovers are most common in the temperate Northern hemisphere but high altitude species are also common around the tropics.

Clovers usually have trifoliate leaves with dense spikes of small white, yellow, red, or purple flowers. Clovers are known around the planet to be an excellent pollinator plant attracting diverse species of bees, beetles, moths and butterflies. Clovers are a low maintenance nitrogen fixing crop that produces abundant flowers and high quality seed under both irrigation and rain-fed conditions depending upon specie(s) or cultivar(s) used. They are successful under variable soil conditions including some acidic soil and are often used for reclamation purposes. They reduce the application of synthetic fertilizers on the farm and are hence economically viable. Clovers can be grown singly or in combinations with other cereal crops or forage crop such as alfalfa and as parts of mixed legume pastures. Clovers are of particular interest to organic farmers due to their suitability for the purpose of green composting.

For organic green manure/nitrogen fixation purposes, these crops should be grown alone and either grazed or harvested as hay or alternately combined with soil post maturity (“plowed” down). If growing with a companion/cover crop as in with silage or with a cereal in an organic system, for Best Management Practices (BMP), kindly consider the following:

1. Plant the clover first—either broadcast and harrow pack or shallow plant with a seed drill to cover as much ground space as possible.
2. Wait 7-10 days to give the clover an opportunity to germinate (head start).
3. Plant the cover crop over top of the clover. Plant the cover crop at 40-60% of the normal planting rate.
4. While harvesting these crops for fodder, do not remove foliage below the lowest leaves (about 6 inches) or the crop cannot regrow. Additionally, once the crop flowers, it will have limited vegetative capacity so plan your management according.
5. Consider limit grazing the crop as it produces a mass of vegetation and animals will trample the crop and waste a lot of the forage.
6. Alternately, you can consider planting clover in alternate rows (for example two rows of cereal followed by one row of clover). This will work better with wider row spacing (like 10 inches).

Two new annual clovers, namely, FROSTY Berseem clover and FiXatioN Balansa clover have great potential for



FROSTY Berseem clover foliage. Credit: J. Hall.

organic farmers in Western Canada. Both clover seeds are small (FiXatioN at 265,000 seeds/lb after coating); and are therefore extremely cost effective in comparison to traditional species like Crimson Clover and Hairy Vetch. Due to the smaller seed sizes, it is better to plant the crops shallow at approximately a quarter inch, to allow for optimum emergence. Both clovers are annual and function best as either a fall planting to overwinter or spring planting. These annual clovers are fall planted in several locations to allow a full productive crop the following spring. They both have excellent winter survival but can suffer from winter kill. It is advisable not to plant clover crops too early in the spring. The one exception might be in old alfalfa stands where later planting may affect the remnant alfalfa.

### FiXatioN Balansa Clover

FiXatioN is excellent high quality, annual, legume forage with low/no incidence of bloat and high amount of biomass production. Can be planted on its own or in combination with other forages. The crop can be planted on its own to produce high yields of quality legume forage and to fix nitrogen for subsequent cropping.

Post emergence, FiXatioN will have limited growth for 20-40 days as it develops a significant root system to then allow extensive dry matter growth. The crop will start out in a rosette stage and then grow both laterally and vertically. The lateral growth provides very good soil coverage and will often smother other volunteer crops and weeds, making it a great tool for annual nitrogen fixation and weed control in an organic farming system.

The crop is excellent in nitrogen fixation. Trials conducted in Illinois and Oregon in the US have demonstrated 200 lbs N per acre. FiXatioN has deep taproot system breaking hardpans and scavenging soil nutrients; thereby accessing nutrients that are trapped deep in the soil and

bringing them up to be available for subsequent crops. Root channels developed by the root system of the crop provide paths for water to penetrate deeper soil zones. It can be sown for the dual purpose of improving soil health along with the benefit of excellent annual legume forage. Plant 5-8 lbs/acre; 3-5 in mixes.

*Continued on page 27...*

**DISCOVERY  
ORGANICS**



We are a locally owned independent distributor of certified organic fruits and vegetables. We specialize in working with established and emerging local farms – big and small. This includes providing market intelligence about seasonal crop supply in our regional markets and other support services.

Whether you are a new farmer, considering organic certification, or want to expand your production, we are your go-to.

**[www.discoveryorganics.ca](http://www.discoveryorganics.ca)**  
**Tel 604 299 1684**

# RESILIENCE IN CO-OPERATION

## Learning from Italy's Thriving Agricultural Co-operatives



*The Cantina di Sorbara produces Lambrusco wine for Italian and international markets. The co-operative of 1,200 members has invested in five processing plants and lab facilities to test grape and wine samples daily to ensure it is producing the highest-quality product possible. Credit: Chris Bodnar*

By Chris Bodnar

Over two weeks in June, I had the opportunity to join other farmers and a group of Vancity Credit Union staff on a study tour in Bologna, Italy. The focus of the tour was the agricultural co-operative sector.

The Bologna region is unique because of its co-operative sector. It is located in the heart of the Emilia-Romagna region, which is an agricultural center of Italy. Agriculture in this region makes up 4% of the region's employment, while the overall agrifood system (including agriculture, food science, distribution, retail, and restaurants) makes up 16.7% of the region's employment.

Co-operatives are integral to the region's overall economy of the region. While only 1.3% of businesses in the region are co-operatives, they generate approximately 15% of the region's employment and 20% of the region's GDP. Co-ops play an even larger role in agriculture and agrifood systems. 95% of the region's wine is produced by co-operatives. Co-operatives pack and distribute much of the fresh produce, meat, and dairy. Over 60% of the region's groceries are purchased through consumer co-operatives.

In many ways, Italian farmers are facing the same challenges as farmers in BC and other parts of the world. The production of agricultural land is decreasing, the age of farmers is increasing, and many rural areas are depopulating. Global trade has made it more difficult for individual operators to access markets.

By working together in co-operatives, the farmers of Emilia-Romagna have been able to respond to the global pressures on agriculture. Co-operatives have allowed farms to specialize, produce high-quality, value added products, and sell into an international market.

The specialty products of Emilia-Romagna farmers are known around the world. For example, farmers don't just produce milk; they make Parmesan cheese. Farmers don't just grow grapes; they make high-end wines and balsamic vinegar.

Now, agricultural universities in the Emilia-Romagna region are at enrolment capacity and many see new opportunities to maintain the region's agricultural strength into the future.





*BC Organic Farmer Arzeena Hamir speaks with a Fattoria Rio Selve farmer who specializes in radicchio production using permaculture practices in the Treviso region of Italy. Credit: Chris Bodnar*

Some of the key lessons from the study tour are:

### Supporting Diversity of Scale

The processing co-operatives we visited had many farmer members—up to 1,400 in some cases. These members were not uniform in size. Some farm a couple of hectares while others farm 25 to 30 hectares. The co-operatives are open to members of all sizes. This supports a diversity of farmers to continue producing when many would otherwise be unable to access markets on their own. In turn, most co-ops have rules that require members to sell exclusively to the co-op.

### Market Response

A key message we heard throughout our trip was that Italian consumers increasingly demand environmentally responsible production of their food products. Co-operatives have helped farmers adapt to these demands through extension services, restricting the use of GMOs, and marketing products in response to consumer demands. In some instances, co-ops have focused on Integrated Pest Management (IPM) practices to reduce chemical use. In others, they have helped coordinate transition to organic certification by ensuring market access for products. Overall, 8% of Emilia-Romagna’s agricultural land is farmed organically.

## Encourage Growth & Soil Activity

**BioFert Manufacturing Inc.** was established with a vision of providing high efficacy, non-toxic, biodegradable and eco-friendly fertilizers and soil additives for use in agriculture. **Here are some of the EcoCert approved fertilizers to encourage continued growth throughout the season.**



#### Organic Blend 6-2-7

Organic Blend 6-2-7 is an EcoCert approved granular fertilizer for use in soil/soil-less medium for all plants. It’s a NPK fertilizer, enriched with calcium, sulphur, zinc as well as humic acid. It can be used as a pre-charge in various soil mixes. Organic Blend 6-2-7 increases microbial activity and organic matter, improves soil structure and nutrient retention with minimal leaching losses.

#### Root Conditioner 0-0-2

Root Conditioner is an EcoCert approved liquid

product that promotes rooting and helps in maximum nutrient uptake. It assists in chelation and uptake of nutrients in rhizosphere when used in drip/drench applications, shortening time to transplant in seedlings and cuttings. It establishes dense root structures from early stages and boosts microbial activity in soil and growing media.

#### Cal-O 6%Ca

Cal-O is an EcoCert approved calcium fertilizer, free of chlorides. It is formulated using a natural chelation process that makes it a unique product. In addition to calcium, it also provides boron. Cal-O ensures quick absorption and mobility of calcium. It strengthens cell structure in plants, boosts flowering and rooting, and maximizes fruit quality and uniformity.



For more information, visit BioFert’s website at [www.biofert.ca](http://www.biofert.ca), or call 604-557-1496.



*The el Tamiso organic co-operative manager explains that their co-operative of 35 members has grown by 10% annually and now distributes across Europe. Credit: Chris Bodnar*

## It's All About Quality

Italian co-operatives place a high importance on overall quality. Many producer co-operatives provide extension support to their growers to help growers achieve the highest quality possible. By requiring members to sell exclusively to the co-op, the co-op is also assured it will receive the highest quality product and that growers will not undercut the co-op in the marketplace.

The co-operatives also invest in infrastructure to ensure their processing, packing, and value-added products meet the highest standards. For example, one wine producer we visited has a full-time lab that tests grape samples and wine batches daily, a task individual producers could not achieve on their own.

## It's Also About Logistics

An efficient food system ultimately comes down to being able to move the food products to market in a fast and efficient manner. We visited two distribution centers where many distributors are housed in one facility. By co-locating, distributors have been able to achieve logistical systems that support getting their product to market. Buyers are able to visit one facility and purchase from over 35 distributors, representing hundreds of farms. The Bologna distribution facility can load 30 trucks an hour, sending produce across Europe each day. One organic co-operative of 35 farms, el Tamiso, has been able to grow sales at a rate of over 10% annually by being able to access improved logistical services through these shared facilities.

## Building Resilience During Plentiful Times

A key lesson from the Italian co-operative model is that co-operatives are incentivized to save during good times in order to be better prepared for the bad times. Profits are not taxed if they are kept within the co-operative as

“indivisible reserves.” These reserves cannot be paid out to members, but can be used to stabilize the co-op during poor economic conditions. This helps to achieve balance in the co-ops’ annual finances; they attempt to achieve the best possible return to the farmers for their products while building reserves to support the long-term well being of the co-op.

The results of this planning are clear: during the economic crisis of the past decade, the number of businesses in the region decreased by 1.9%, while the number of co-operatives actually increased by 5%. During the same period, employment decreased by 3.8% while employment in co-operatives went up by 3%.

## Using Scale to Access Opportunities

Ultimately, Italian agricultural co-operatives have allowed farmers to achieve a critical scale to produce high-quality products that sell into global markets. While these co-operatives started small, many have merged over the past two decades in order to be better positioned for global trade. The primary lesson learned in this example is that co-operatives can scale up and take advantage of new opportunities while respecting and supporting a diversity of scales of farming. 🌱

*Chris Bodnar co-owns and operates Close to Home Organics with his wife, Paige, at Glen Valley Organic Farm in Abbotsford. They operate a 145-member Community Shared Agriculture program and sell at two weekly farmers markets during the farming season. Prior to farming, Chris earned a PhD in Communication from Carleton University. He now teaches the Business of Agriculture course in Kwantlen Polytechnic University's Sustainable Agriculture program. Chris sits on the board of the Mount Lehman Credit Union.*



# ECOLOGICAL BIOMIMICRY



## AND THE ART AND SCIENCE OF ORGANIC AGRICULTURE

By Marjorie Harris, BSc, IOIA VO, P.Ag

The Principle of Health, as stated by IFOAM—that organic agriculture should sustain and enhance the health of soil, plant, animal, human, and planet as one and indivisible—is the original premise that modern organic agriculture is based on. This Principle of Health was inspired by Lady Eve Balfour’s words from her 1943 publication *The Living Soil*. Here she writes, “the health of soil, plant, animal, and man is one and indivisible.” Lady Eve Balfour went on to become co-founder and first president of the Soil Association.

Preceding Lady Balfour’s work, in 1940, Sir Albert Howard wrote *An Agricultural Testament*. Sir Albert’s work was based on his keen observations while living and studying agricultural methods in India from 1905–1924. He was sent as an agricultural advisor on assignment by the British Crown. What Sir Albert discovered was that the Indian method of farming had much more to teach him than he had to teach them. He observed that all waste plant and animal matter was gathered for composting and then returned to the garden as a rich humus substance.

Preceding both Lady Balfour and Sir Howard, Rudolph Steiner gave a series of lectures in 1924 that became

the foundation for the organic Biodynamic Agriculture movement. Early on in the 20th century many observers were noticing that chemical based agriculture was depleting the life of the soils and became increasingly concerned. In response to these growing concerns a group of farmers approached Rudolph Steiner as the founder of Anthroposophy for help and guidance. Steiner had established Anthroposophy as a formal educational, therapeutic, and creative system that sought to use mainly natural means to optimize health in all realms of well being.

The inspiration and reason for the emergence of organic agriculture is the Principle of Health in that healthy soils grow healthy plants that support healthy people. So, how has this played out in the organic standards as we know them today? Are we achieving our goals for health from the ground up?

In Sir Albert’s later book, *The Soil and Health: A Study of Organic Agriculture*, he says, “the first duty of the agriculturalist must always be to understand that he is a part of Nature and cannot escape from his environment. He must therefore obey Nature’s rules.”



Mark Gibeau and his compost tea sprayer  
Credit: Marjorie Harris

Following the rules of nature leads us to another pioneering concept, “biomimetics,” first articulated in the 1950s by American biophysicist and polymath Otto Schmitt. Ecological Biomimicry is a method for creating solutions for perceived problems by emulating designs and ideas found in nature. This is the point where organic agriculture blurs the lines between art and science and we chase the gold at the end of the rainbow. Because agriculture is a man made artifice placed on nature’s landscape, we need to find natural examples for ecological biomimicry that bring in natural health balances into our farming practices.

How do we preserve or enhance the natural integrity of a forest or prairie soil while growing foods for human purposes? As an example, consider soil fertility management just from the basis of adding waste plant and animal matter and how the following organic standard is interpreted and implemented by the individual operator.

**COR CAN/CGSB 32.310 General Principles and Management Standards Section 5.5.2.2**

*Soil amendments including liquid manure, slurries, compost tea, solid manure, raw manure, compost and other substances listed in Table 4.2 of CAN/CGSB-32.311, shall be applied to land in accordance with good nutrient management practices.*

A simple overview of employed organic methods:

**Organic Standard Timing Method**

Raw manure, solid manure, liquid manure, and slurries are simply incorporated into the soil according to the tim-

ing specified by the standard. Soil organisms are left the task of capturing the nutrients. This method is the least effective for retaining nutrients in the root zone of the intended crop or for developing a good humus body.

**Biodynamic Method**

The Biodynamic approach employs techniques that call into play some esoteric health principles that go beyond the local environment to also consider the cosmic forces that affect the entire planet. A cosmic calendar is followed and the Biodynamic preparations foster fungi and other factors that improve compost production dramatically according to practitioners. Field sprays and teas vitalize the soils along with the compost applications. The resulting plant growth achieved has greater immunity and perhaps a greater concentration of phytonutrients. The soil fertility is measurably enhanced by these methods, the nutrients are stabilized for slow release to crops, and humus and organic matter are increased in the crop root zone.

**Soil Food Web Method**

The underlying concept for the Soil Food Web soil health method is based on the concept that Comprehensive Soil Analysis samples demonstrate that the majority of soils around the planet have all of the mineral nutrients a plant needs, it is just a matter of releasing those minerals to the plant in a bioavailable form. Compost teas are cultured in such a way that when applied to the soil the microorganisms released are capable of transforming the minerals into plant bioavailable forms. Composts are also

applied. The outcomes are dependent on the qualities of the individual compost teas. The addition of composts measurably enhance the nutrients that are stabilized for slow release to crops, and humus and organic matter are increased in the crop root zone.

## Standard Composting Method

Standard composting according to time, temperature, and turning produces a product that when applied to the soil, measurably enhances fertility, the nutrients are stabilized for slow release to crops, and humus and organic matter are increased in the crop root zone.

The health principle emphasises that the healthy farming eco-systems is dependent and built on the foundation of healthy soils and cannot be separated from the soil health. The health of plants, animals, and people are interdependent on the health of the soil and plant and animal matter being returned to the soil fertility in a manner respecting Ecological Biomimicry. "How would Mother Nature do it?" Is a relevant question to ask when evaluating our farming and soil fertility practices. The more we can quantify our current practices and have the conversation on sharing the best ecological biomimicry practices across the board, the more we'll be able to benefit every level of planet health. 🌱

*Marjorie Harris is an agrologist, consultant, and verification officer in BC. She offers organic nutrient consulting and verification services supporting natural systems.*

**EATMORE**  
SPROUTS

**Organic Sprouts  
& Greens**

Grown in the Comox Valley  
Year Round!

Look for our sprouts & greens  
at your favourite  
grocer or restaurant.

2604 Grieve Rd., Courtenay, BC V9J 1S7  
250.338.4860 | [www.eatmoresprouts.com](http://www.eatmoresprouts.com)

*Organic, naturally.* For thirty five years, Horizon Distributors has supplied retailers with premium quality, organic, natural and gourmet products in the dry, chill and frozen categories. Our 5,000 SKUs provide healthy alternatives for your customers, whether they are long-time natural foods consumers, or those with special dietary needs searching for new options.

A market leader in Western Canada for decades, Horizon is the parent company of a national network of Canadian businesses distributing organic and natural foods, health and beauty aids, supplements and household products.

**horizon**  
distributors

The Horizon Group comprises the following well-established companies, which supply more than 20,000 SKUs to 4,000 outlets across Canada:

- Horizon Distributors, Burnaby, BC
- PSC Natural Foods, Victoria, BC
- Christmas Natural, Burnaby, BC
- Tara Natural, Burnaby, BC
- Organic Horizons, Guelph, ON
- Corwin Distribution, Concord, ON
- Directa Distribution, Pointe-Claire, QC



[www.horizondistributors.com](http://www.horizondistributors.com)  
604.524.6610 | 1.800.663.1838

# FOOD JUSTICE AND THE FACE OF ECOLOGICAL FARM INTERNS IN ONTARIO



By Charles Z Levkoe and Michael Ekers

*Originally published by Ecological Farmers Association of Ontario in "Ecological Farming in Ontario" April 2016. This is part 3 of a 4 part series on research into unpaid farm labour. While the research was conducted with farms in Ontario, much of the findings likely carry over to BC.*

This article is the third in a series that describes the increasing numbers of non-waged interns working on ecological farms across Ontario. As farmers welcome those seeking seasonal farm experiences as a way to share knowledge and skills and to meet labour demands, our research has been exploring the broader implications of these trends. In this article, we look at who exactly is being trained to farm through ecological farm internships and the potential impact on the future of food and farming.

Opportunities for non-waged internships are typically promoted on environmental-related websites and passed on through word-of-mouth. Despite being openly available, there is an extremely narrow demographic of individuals who take on these positions. Likely unsurprising to most farmers, the vast majority of non-waged interns in Ontario are young, white women (and some men) that come from relatively educated and affluent backgrounds. As one farmer exclaimed, "White, middle-class, female, educated, suburban, that was almost all of our interns. Out of the 21 interns we have had, I think we only had four men over the last three years." The only major exception is interns working on urban farms who are almost exclusively young people of colour with diverse and sometimes poor economic backgrounds.

This demographic trend raises questions about who is being trained as the next generation of ecological farmers. When asked why so many non-waged interns were white, one farmer responded, "Well, have you seen the society I live in? It's predominately white and these are the people who have the opportunity to be able to leave their home and not work." Taking four to eight months away from paid employment and living in a rural community can be extremely isolating and demands a high level of economic and cultural privilege. Reflecting on the potential discomfort of being a person of colour working on a rural farm, an urban intern commented, "In many places, you would be the only person of colour amongst the army of white people."

The apparent exclusivity of internships correlates with observations of food movements more broadly. For example, commentators have observed that many promising alternative food initiatives such as purchasing organic food boxes, shopping at farmers' markets, and participating in community supported agriculture projects tend to be dominated by white people. Our study has suggested that many of the social characteristics of consumer-based food movements are being reproduced on farms through internship programs.

This highlights the barriers to entry and the subsequent education, training and other privileges that are part of the experience. Further, the limits to participation may hinder opportunities for building a more inclusive ecological farming sector that has the potential to impact the broader food system. Much like non-agricultural internships, structural inequalities ensure that the few jobs

available go to those who can afford to work without a wage. This means that only specific groups of people are able to build strategic relationships and gain experience towards a particular career path, in this case farming. Many farm operators acknowledged this reality; for example, one farmer lamented, “Not paying interns limits the demographic of people who are able to work on organic farms and learn the trade.” The concern here is that ecological farm internships may be promoting a particular kind of farmer, further limiting the diversity of alternative food movements more broadly. Recognizing this problem, a farmer commented, “I’m not saying the farmers are racist and not selecting people of colour to be interns . . . It’s racism in its latent form, where people are just not comfortable going there.” The point highlighted here is that questions of race and farming are not as much about intentions, but about the effects and who is being trained to farm (or not) and in the places that training happens.

The industrial food system has a deep history of systematically mistreating people based on their ethnicity and ‘race’. In respect to agriculture, commentators argue that we tend to romanticize an agrarian narrative specific to white communities while ignoring the contributions and struggles of people of colour in food production. In North America, people of colour own less farmland, operate disproportionately fewer farms, and make less income from farm work. The solution is not simply to encourage young people of colour to move to rural communities to work as farm interns. As one urban farmer suggested: “It is not enough to just bring people of colour onto farms without recognizing the history and current situation of slavery and sharecropping.” These comments from an urban farmer suggest that addressing the exclusivity of ecological farm internship programs must begin with a conversation that acknowledges ways that the Canadian agricultural system has been established and maintained on the backs of unpaid and low waged racialized and gendered labour.

While there are no immediate solutions, farmers and interns had many suggestions of ways to tackle these challenges. First and foremost, it was suggested that farmers looking to train interns and engage more deeply with issues of labour justice should consider offering paid internship opportunities. This would ensure that a wider diversity of people interested in agriculture as a career path could participate in ecological farm training experiences and that labour is valued. People of colour aspiring to farm are highly likely to find themselves working and learning on urban farms so it is crucial that urban-based programs be as substantive as some of the ‘opportunities’ available outside of cities.

Training people from diverse backgrounds through paid internships not only expands the pool of new farmers, but also brings new ideas into the ecological agricultural sector and opens marketing opportunities to new populations. Finally, farmers suggested building partnerships

with agricultural and food movement organizations that are tackling issues of social justice such as Black Creek Farm, FoodShare, Afri-Can Food Basket, and Farm-Start. Through networks, ecological farmers can be part of robust social movements that address the structural problems of the dominant food system and society more broadly. 🌱

If you would like more information on this research project, to comment on these issues or contact us, please visit our website:

🌱 [foodandlabour.ca](http://foodandlabour.ca)

*Dr. Michael Ekers is an Assistant Professor in Human Geography at the University of Toronto Scarborough. His work mobilizes social and political theory and political economic approaches to understand the making of different environments and the cultures of labour in environmental spaces.*

*Dr. Charles Levkoe is the Canada Research Chair in Sustainable Food Systems and an Assistant Professor in Health Sciences at Lakehead University. He has been involved in food sovereignty work for over 15 years in both the community and academic sectors. His ongoing community-based research focuses on the opportunities for building more socially just and ecologically sustainable food systems through collaboration and social mobilization.*



**Celebrating 27 Years**

Pro Organics is proud to represent BC organic producers and to be celebrating our 27th year of supporting local, organic, sustainable farming.

Today, as it was 27 years ago, our mission remains the same:  
Promoting the growth and integrity of organics from field to table.



4535 Still Creek Avenue, Burnaby, BC V5C 5W1  
Tel: 604-253-6549 or 1-800-461-1122

# FARMLAND ADVANTAGE



## Making Positive Change to Farmland Biodiversity in BC

By Susan Smith, Alison Speirs, and Dave Zehnder

**F**armland Advantage is a research and development project that works with farmers to conserve and enhance critical natural values in British Columbia. These natural values are often referred to as ecosystem services, which are services of a natural environment that benefit society as a whole. Examples are wetlands that filter and purify water and forests that clean the air and provide habitat for wildlife. The Farmland Advantage model works with the BC Environmental Farm Plan Program to help farmers identify the natural values on the farm that can be protected and enhanced. It then helps farmers implement best management practices (BMPs) and contracts the farmer to preserve them. These practices can include actions such as water or stream setbacks, strategic fencing, reforestation, or rangeland enhancement. In this model, funding is provided to the farmer to help put BMPs in place and to maintain them over the long term.

A global example of the economic benefits of this approach can be seen by looking to New York City. In 1997, this type of program saved the city 7 billion dollars. Instead of installing a costly water filtration plant, area farmers were contracted to amend management practices such as fertilizer regimes and livestock grazing to protect streams. Field management practices to reduce soil erosion were also implemented. Another example is in Costa Rica where, in the 1950's, 80% of the forest cover was intact. By 1985, with the forest cover down to 20%, the trend was reversed by providing incentives for Costa Ricans to plant and maintain trees. As a result,



forest cover in Costa Rica has rebounded to about 60%. The Farmland Advantage team includes coordinator Dave Zehnder, who has the background in ecology and agriculture to develop these farmland projects. Other team members include an accountant to keep everyone whipped into shape, and rangeland manager, Don Gayton, who is one of the first scientists to get involved in the project. Michelle Molnar, lead economist with the David Suzuki Foundation, is also part of this diverse team of individuals tasked with developing and delivering the Farmland Advantage Project. Key partners include the BC Environmental Farm Plan Program (EFP) and associated EFP Advisors.

The Farmland Advantage Project and the EFP Program work synergistically in that EFP Advisors assist producers to develop an EFP and provide a range of planning services that can then allow access to incentives that enable producers to implement BMPs. After implemen-



tation, Farmland Advantage develops necessary contractual arrangements to assist with the cost of maintaining the projects and their ongoing assessments. Being able to access both programs through the EFP Advisor that visits the farm and helps them through the process makes it easy for the farmer to get it all set up.

Currently, Farmland Advantage is a five year research and development project that is working towards a long-term program. It involves partners and agencies working together to develop a solid, replicable program model capable of being administered independently and sustainably, and able to show tangible successes. Working groups made up of farmers, technical experts, and funders act in an advisory capacity to develop the project at the regional scale.

The Rock-A-Boo Ranch is one of the first Farmland Advantage projects in the Kootenay region of British Columbia. Rock-a-Boo Ranch is located in Brisco, half an hour north of Invermere, and has been farmed by John Palmer and his family for over 100 years.

In addition to cattle, the farm also has sheep, ducks, goats, and chickens, as well as two guard donkeys. This project was borne out of a need to protect the unique Lower Bugaboo Falls, the largest low elevation cedar grove/rainforest ecosystem in the East Kootenay, and one of only six overall. Historically, these were salmon spawning grounds and a location of meeting for Indigenous peoples. John recognized the need to protect this site from having his animals use it for grazing and watering.

**RANCHO COOLING**

*Frozen, Refrigerated, and Dry Storage Facilities*

**Megan Payne**  
 250-938-5062  
 cooling@ranchovignola.com  
 www.ranchocooling.com

3155 Pleasant Valley Rd • Armstrong, BC • V0E 1B2

**Similkameen Okanagan Organic Producers Association**



*Join other growers committed to maintaining the integrity of organic farming in British Columbia*

- Affordable certification fees
- ISO options available

For more information, contact  
 Cara Nunn: T 250-540-2557  
 simokorganics@gmail.com



**SOUTHERN IRRIGATION**

Intelligent Water Solutions

View our product guide online:  
[www.southerndrip.com](http://www.southerndrip.com)



**MEGANET Sprinklers**

- Soft spray ideal for germination
- High distribution uniformity
- Low cost per acre
- Easy to install
- Easy to move





**POLYNET Flexible Pipe**

- Simply disconnect fittings and roll up when not in use
- Integral welded 1/2" threaded connections
- Easy to store
- Easy to install
- Easy to move





**CHILLIWACK** 44160 Yale Road West **1.800.663.2615**

[www.southerndrip.com](http://www.southerndrip.com)

In addition to this ecologically and culturally significant site, John also fenced off an area of forest, building alternate shelter so that the trees would not be destroyed from over-grazing and bark rubbing. Finally, as part of the project, he fenced his cattle from the Crown Lands of the Columbia wetlands. This saved him time in animal management, reduced mortality risk, and also aided in preservation of the sensitive wetlands. John worked with his local EFP Advisor to develop the plan and build the fence. He is now receiving an annual payment to maintain the area.

The Farmland Advantage Project has been rolled out in phases. Phase 1 included a literature review and small scale trial of the concept to create an initial model. Phase 2 developed the model further by establishing sites across the province. Working with economists and agriculture and wildlife experts along the way, the goal was to look at different types of agriculture in different regions to see if there are differences in results. This research and development phase of the project is being carried out using a continuous improvement approach as they learn new and better ways of delivering the program and working with different partners.

Phase 3 is about developing the project into a long-term program. This phase involves the establishment of demonstration and test sites in three regions of the province: Kootenays, Okanagan, and Lower Mainland. In year one of this five year project, Farmland Advantage was able to sign on 60 farmers and establish 60 demonstration sites. In that time, over 740 acres of prime riparian habitat, including over 30 km of shoreline, was conserved and enhanced. The project is now working to establish funders that will grow and sustain the program over the long term.

A key aspect of the Farmland Advantage Project is ongoing monitoring to measure the benefits. The Alberta Biodiversity Monitoring Institute (ABMI) provided the monitoring method that tries to answer the basic question, "What positive changes can be measured when BMPs are implemented and maintained?" According to the ABMI, the science is sound on the benefits of BMPs that protect riparian zones, allowing development of a "rapid" assessment for measuring the results. This method, known as a riparian health assessment, is being used by Farmland Advantage to measure indicators of riparian health and the results of the projects.

For example, invasive (noxious) weeds can to be a problem in riparian areas. This tool scores the area in terms of presence of weeds. Over time, it is possible to use this established weed score to measure the change or improvement of a riparian area once BMPs have been implemented.


Among the many examples of the local benefits to biodiversity, an important one is bird populations that rely on protection of riparian zones. Riparian zones are extremely valuable for providing food, nesting sites, and refuge for an abundance of wild birds in British Columbia. An

example is the Lewis's Woodpecker, listed as a Species At Risk, and observed visiting one of the project sites located in the Kootenays. Bird Studies Canada is one of the partners helping Farmland Advantage to develop monitoring methodology specifically for birds using the sites. An important goal of the Farmland Advantage Project is to ensure the farmer is not losing money by participating in the program. Key to this is a cost-benefit analysis, currently underway, that includes the cost of creating and maintaining the BMPs. This analysis will guide payment levels and ensure the program doesn't become another unpaid job for the farmer.


There is a long list of partners involved with Farmland Advantage including universities, BC Agriculture Council, Investment Agriculture Foundation of BC, farming and wildlife agencies, private foundations, conservation funds, local governments, Government of Canada, and the Government of BC.

For more information on Farmland Advantage, visit their website at:


 [farmlandadvantage.com/about](http://farmlandadvantage.com/about)

Or contact Dave Zehnder by phone: 250-342-0325, or email: [dave@farmlandadvantage.com](mailto:dave@farmlandadvantage.com) 

*Susan Smith is an Industry Specialist for Field Vegetables and Organics, and Alison Speirs is an Environmental Agrologist with the BC Ministry of Agriculture. Dave Zehnder, based in Invermere, is the Project Lead for the Farmland Advantage Project.*



**Your Local Choice  
for Over 20 Years**



[choicesmarkets.com](http://choicesmarkets.com)  
committed to our customers, our communities and our planet



**Table 1.1 - FiXatioN Balansa Clover**

<b>FEATURES</b>	<b>BENEFITS</b>	<b>ADVANTAGES</b>
Can add over 200 lbs N/acre	N-Fixation	Improves soil N profile
Deep taproot system	Breaks up soil compaction and leaves water channels	Shares limited resources while creating channels for water and subsequent crop roots
Fast aggressive forage crop	Outgrows weeds	Better economic return
Adds huge biomass to the soil	Gets to nutrients that are deep in the soil and brings them up to be available to subsequent crops.	Suitable for organic agriculture
Small seed size helps in establishing in cracks and crevices	Breaks up compact soil effectively	No tillage required; Higher crop growth; Better financial return;
Excellent quality annual forage legume	Well established plots can withstand multiple cutting/ grazing	Higher economic returns via dependable yield
Small hardy seed	Successfully broadcasted or drilled	Uniform growth and high quality forage yield
Compatible with grasses and alfalfa	N-collected is released for use by grasses	Better crop growth; great in mixes
Better annual compared to competing perennials like red clover/yellow blossom clover	No need for establishment year like other clovers	Profitable in organic agriculture as an immediate soil N-fixer;
Big taproots that break up hardpan	Allow for water penetration and root growth	Facilitates subsequent crop growth
Stem is longer with greater diameter	Good soil builder	Better subsequent crops
Long and extensive tap root system	Root channels after the crop provide a path for water to penetrate deep soil zones.	Helps establishing following cash crops in the crop rotation cycle; Perfect for cereal crops
Frost resistant	Can be seeded early	Assured crop production for the season (less likely to freeze out)
Highly digestible, palatable and bloat free legume	Attracts grazing cattle	Adds to better cattle body mass Reduce bloat based cattle deaths
Suitable as an excellent, highly digestible wildlife mix rich in proteins	Attracts deer and waterfowl	Contribute towards higher body mass and racks for wildlife species like deer
Good pollinator	Attracts diverse species of pollinating insects	Boon for any crop producer
Multi-use, versatile crop	As a cover crop for N-Fixation & weed control As a forage crop in mixes with other legumes and grasses	Improving soil profile; Higher economic return Promote sustainable agricultural practice and can serve as an important crop for organic agriculture

## Frosty Berseem Clover

Frosty Berseem Clover can survive early season frosts; and can be planted on its own or with other forages (like alfalfa) resulting in high yield of quality forage legume for the purpose of harvesting or to graze. The salt tolerant crop has big tap root system and can fix nitrogen efficiently, scavenge nutrients, break up hardpan and also serve as an excellent pollinator crop. Can be planted as a cover crop for establishing alfalfa (10-20 % of mix), giving an opportunity for earlier cutting. Also works well to be planted with established alfalfa stands in either thin parts or bare patches. Frosty grazes well alone or in a va-

riety of mixing options. Frosty can be used as key legume in your annual forage mixes or used as an emergency crop in years short of forage. Frosty is a well-grazed annual clover, with low bloat/no bloat legume (less filling). Plant 12-15 lbs/ acre, 5-7 in mixes. 🌱

*Saikat Kumar Basu has a Masters in Plant Sciences and Agricultural Studies. He loves writing, traveling, and photography during his leisure and is passionate about nature and conservation.*

*Acknowledgements: Grassland Oregon (USA) & Performance Seed (Canada)*

**Table 1.2 - Frosty Berseem Clover**

FEATURES	BENEFITS	ADVANTAGES
Frost resistant	Can be seeded early/can grow after early frost	Assured maximum crop production for the season
Excellent quality annual forage legume	Well established plots can withstand multiple cutting/ grazing	Higher economic returns and higher forage quality
Long tap-root system	Capable of breaking hard pans and improving soil quality	Increases flow of water and air in the soil for subsequent crops; brings up trapped nutrients like P, K etc from deeper to upper soil layers making them easily available for subsequent crops
Annual legume Well suited for growing with alfalfa	Can Fix-Nitrogen; capable of fixing 150 lbs N/acre; adds substantial biomass to the soil 10-20% of Frosty mixed with alfalfa has better yield than alfalfa alone. Similar water requirement as alfalfa	Improves soil N profile for subsequent crops; suitable in crop rotation cycle; can be efficiently used in Organic agricultural production system Yield can be improved potentially over 30%
Emergency crop	Can be useful in years of low production	Assured crop production and forage yield
Animal feed preference	Livestock, poultry and wildlife readily accepts Frosty often preferring over alfalfa	High economic profits
Salt tolerant crop	Can grow successfully in soils with lower soil pH being moderately salt tolerant	Improves nutritional quality of soil; removes salt form the soil, effective for use in phytoremediation
Highly digestible, palatable and bloat-free legume	High value feed	Adds to better cattle body mass Reduce bloat based cattle deaths
Suitable as an excellent, highly digestible wildlife mix rich in proteins	Attracts deer and waterfowl	Contributes towards higher body mass and racks for wildlife species like deer
Late maturing, good pollinator crop	Attract diverse species of pollinating insects	Boon for any crop producer
Diverse, multi-use crop	N-fixer, cover crop, annual forage, phytoremediation friendly, good as wildlife mix and as a pollinator crop	Economically and ecologically sustainable crop

# A DIY APPROACH TO FIGHTING

## Cherry Fly



*Tree covers provide growers with an alternative to spraying. Credit: Marilyn Roberts*

## How one woman's journey to worm-free fruit led to the birth of a new business

By Marilyn Roberts

In the early 1900s, Kaslo was a major fruit producer in British Columbia, sending boxes of huge cherries as far away as England. Hence, there are many old overgrown orchards in the area. When I bought a place there in 1990, I inherited several old apple trees and even a couple of cherries, which had been planted by a previous owner. They had beautiful fruit, but every one was wormy. I did a little research and discovered cherries had to be sprayed over and over to kill the cherry flies that emerge from under the trees all summer long.

Not too keen on poisoning my backyard every year, I decided to try alternative methods. My first try was to pick all the young cherries before the worms had a chance to mature. The next year, I still had worms. I decided that if the flies emerged from under my trees, I could tarp the ground to keep them there. When that didn't work, I reasoned that the flies must have seen the light at the edge of the tarp and crawled to it. The next year, I tried clear plastic, but still I had wormy fruit. Apparently, the critters were flying from other trees in the area or being blown in by the wind.

That was when I got mad—and decided I was going to finally get some good cherries without spraying. I cut up some old nylons and made bags to cover a few bunches of fruit—that was the first year I was able to harvest some cherries without worms.

The next year, I bought some old curtain material at the thrift shop and fashioned larger bags to cover whole branches. I was worried that the material might damage the leaves, but it worked perfectly, and I had a lot more good cherries. The foliage inside the bags was even in better shape than the rest of the uncovered tree.

By then I had good Internet service so I went looking for netting to cover the whole tree. It was expensive! I finally found a store in the US that had brand new bulk netting cheaper than anywhere else, and after doing some calculations I ordered almost \$600 worth to cover my 16-foot tree.

I made a pattern, but the weather was rainy that spring so I had to sew it inside on my old treadle machine. Imagine netting to cover a room almost 16 feet square and high,

all white with no markings, piled up on a living room floor. It was a challenge, but when I finished and we took the whole pile outside, it was a bag that fit perfectly over the tree. I was astounded that it actually was the right size and shape. That was the first year we got all the fruit with not one worm.

Unfortunately, the material was not UV resistant and started to tear when we took it off. I did some serious searching online looking for better quality, and for a while, if you looked for insect netting online, my post was at the top of the list. I discovered no one in the world seemed to have what I wanted. I couldn't find anyone in North America that made netting; they just bought it from other places and resold it. The samples I received from China, Russia, India etc. all were poor quality, not what I wanted. Finally, one factory sent me good quality netting, but it wasn't UV resistant and the holes were way too big.

When I sent them my standard "thanks, but no thanks" letter, they wrote back to say they were a newer factory and could make anything I wanted. We put our heads together and came up with an amazing fabric, perfect for the purpose. They had to re-tool several times to get it just right.

I got ready to order some and look for people in the area who could sew when they told me that whatever I was doing with it, they could do it cheaper, faster, and better. I sent them a pattern and ordered nine bags of two different sizes plus some bulk material for research. Getting them through customs was a real learning experience.

That year I found several people with two cherry trees so I'd have a control tree and sold them the bags at less than my cost in return for a sample from both trees. I also made small bags so I could cover branches on other people's trees for research. I picked and opened hundreds of cherries that year and recorded the number of worms in each one, where it was picked, and whether it was covered or not. Most of the uncovered cherries were wormy, some with several of the bugs, and none of the covered cherries were wormy except for a couple from a tree that had come open around the trunk to allow a fly or two access to the fruit. In other words, it worked spectacularly. My data is available to anyone—just email me for a copy.

About the same time I heard about a man who had lost his cherry orchard to the bank when wasps moved in just before he harvested, and there are other stories about poor harvest because of birds. Luckily, my netting also keeps out those critters.

The next year I ordered 100 completed tree covers in three sizes and started selling them. For the first year or two I was able to wholesale to other stores, but my costs were very high and I was losing money. I decided to just sell to anyone at the lowest price that would cover my costs and time.

More and more people started finding me online when they looked for an alternative methods of dealing with



cherry fly, and those who used the nets told others, so my business grew. I also added two smaller sizes, bulk material, and netting with larger holes that just kept out wasps and birds; this was good for grapes and other crops unaffected by worms.

Since then, I have been selling covers all over North America, and have even covered whole orchards, one with dwarf trees where I made long, wide strips to cover whole rows. I get the most wonderful reports from people who cover their trees with my netting, and that's the real reason I still make and sell these. I feel it's important to give people an alternative to spraying. 🍷

*Marilyn Roberts lives in Kaslo. She recently retired after 38 years teaching ABE (upgrading for adults in all levels of English, math, biology, chemistry, physics and computers) for Selkirk College, and finds herself busier than ever filling orders for Kootenay Covers.*



## Classifieds

### Suppliers Wanted:

Ostro Organics is looking for cleaned, certified organic borage, evening primrose, hemp, safflower, sunflower, camelina oil-seeds. Growers/Processors please contact [info@ostro-organics.ca](mailto:info@ostro-organics.ca) or call 778-922-2229

*Would you like to run your classified ad in the BC Organic Grower? Classified ads are 30 words for \$25/issue (plus tax.) Email Moss at [bcogadvertising@certifiedorganic.bc.ca](mailto:bcogadvertising@certifiedorganic.bc.ca) for more information.*





202-3002 32nd Avenue, Vernon, BC V1T 2L7; p: 250.260.4429; f: 250.260.4436; office@certifiedorganic.bc.ca

## ORDER FORM

Enterprise Name: \_\_\_\_\_  
 Contact Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City/Province: \_\_\_\_\_  
 Postal Code: \_\_\_\_\_ Phone Number: (\_\_\_\_) \_\_\_\_\_  
 Certification Body & No.: \_\_\_\_\_  
 Date Ordered: \_\_\_\_\_ Date Required: \_\_\_\_\_

PST Exemption (for packaging materials)	
<input type="checkbox"/>	Option 1: BCAC Farmer ID #: _____ Expiry: _____
<input type="checkbox"/>	Option 2: PST Number: _____
<input type="checkbox"/>	Option 3: Certificate of Exemption Farmer exemption: 0458FILL.pdf Other enterprises exemption: 0490FILL.pdf or request the appropriate exemption form from the office.

Item	Units	Unit Price	Quantity Discount	Quantity	Total
Stickers 1" round	1000 pc roll	\$13.50	10 rolls \$120.00		
Stickers 1 1/4" square	1000 pc roll	\$13.50	10 rolls \$120.00		
Twist Ties 10" (15,000 per case)	1000 pc	\$13.00	Full Case-\$165.00		

The packaging materials above are only available to COABC Certified Organic members and are PST exempt for qualifying enterprises (see above).

Have you signed a Consent to use Official Marks Declaration Form (July 2006 revision)? Y/N Are you Certified? Y/N  
 With which products will you be using the packaging materials? \_\_\_\_\_

Promo Materials: available to everyone	Member \$	Non-member \$	Tax		
Bucket Hats size M or L *	\$15.75	\$15.75	PST taxable		
Ball Caps	\$13.10	\$13.10	PST taxable		
Natural T-shirts (Plain) S * or XXL	\$5.00	\$5.00	PST taxable		
<b>NEW!! COABC T-shirts</b> Designed by Brian MacIsaac Men's size S-XXL & Ladies sizes S-L	\$17.85	\$17.85	PST taxable		
Organic Tree Fruit Management	\$19.95	\$25.95	No PST		
Western Canada Organic Directory	\$6.00	\$6.00	No PST		
Sub-total (before taxes and shipping):					

\*Limited quantities available - please contact the COABC office for availability

GST # 887782431

### Postage Rates

Minimum charge of \$10.00 per order for any promo and/or packaging materials  
 GST will be added to postage amounts  
 Rates vary and will be calculated at the office

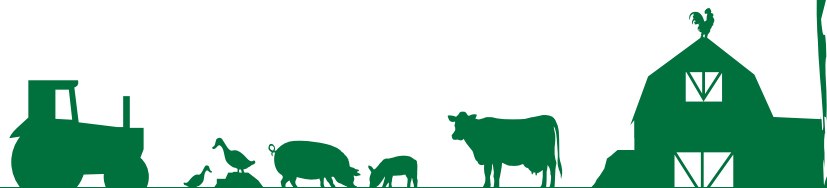
An invoice will be sent with your order. Postage and applicable taxes will be added to your invoice.  
 Please do not send payment before receiving invoice.



# More than a farmer

I nurture healthy soil, that grows  
healthy food, that grows healthy people,  
that grow healthy communities!

  
Certified Organic Associations of BC



[www.certifiedorganic.bc.ca](http://www.certifiedorganic.bc.ca)



BRITISH  
COLUMBIA

Supported by BC's Buy Local program