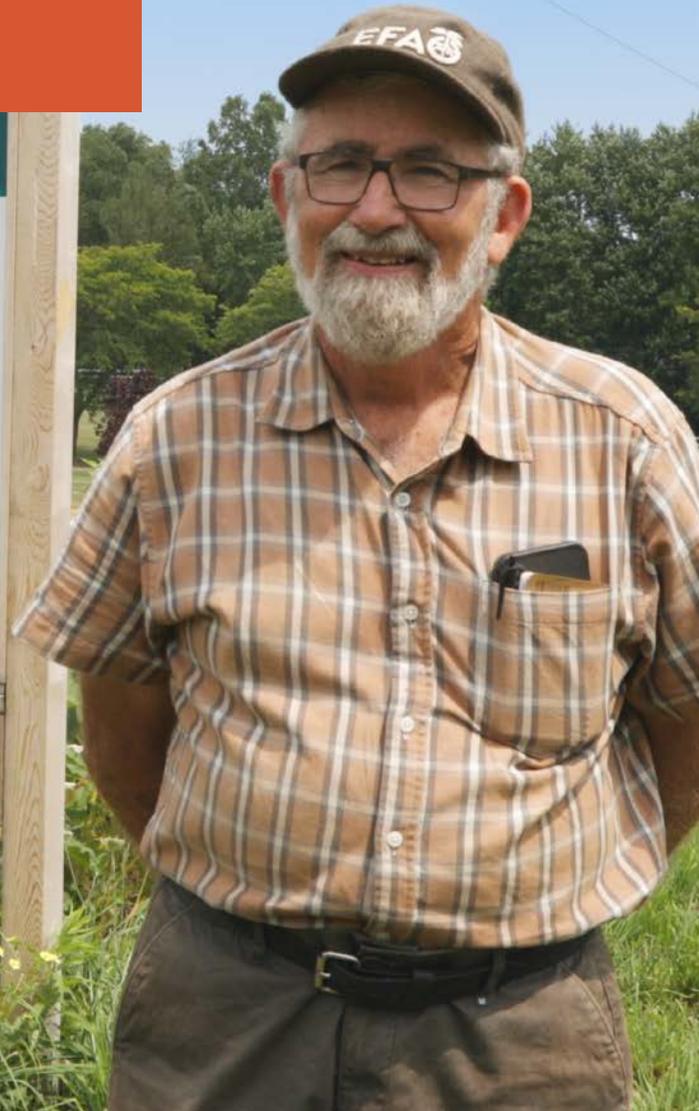


Ecological Farming in Ontario

VOL. 42 | ISSUE 3 | FALL 2021



Living Lab —
Ontario

Regenerative
Programs Comparison

Portable
Cattle Handling
System

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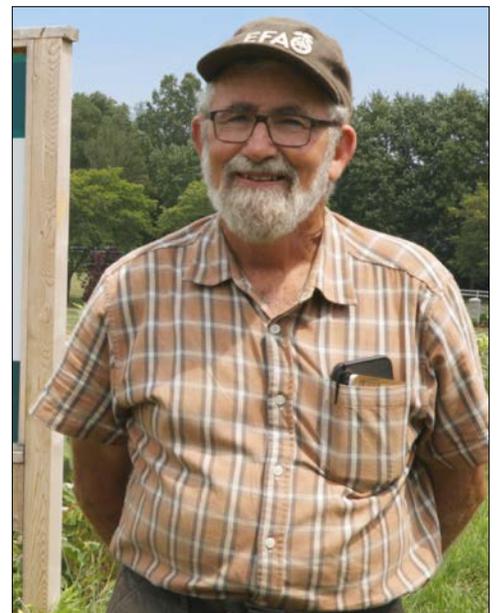
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On the cover

Ken Laing of Orchard Hill Farm poses next to his brand-new Living Laboratories Initiative sign.





What We Do

Established in 1979 by farmers for farmers, the Ecological Farmers Association of Ontario (EFAO) is a membership organization that focuses on farmer-led education, research and community building. EFAO brings farmers together so they can learn from each other and improve the health of their soils, crops, livestock and the environment, while running profitable farm businesses.

Vision

We envision an Ontario where thriving ecological farms are the foundation of our food system, and where agriculture protects our resources, increases biodiversity, mitigates climate change, and cultivates resilient, diverse, equitable communities.

Mission

EFAO support farmers to build resilient ecological farms and grow a strong knowledge sharing community.

Ecological Farming in Ontario

Ecological Farming in Ontario is published quarterly by EFAO as a benefit of membership to help keep farmers and supporters informed and in touch with one another through articles on relevant farming topics, current farmer-led research, upcoming events and other news of interest.

Ecological Farming in Ontario is printed on Rolland Enviro-100 paper, which contains FSC certified 100% post-consumer recycled fibres. Back issues can be found on EFAO's website (efao.ca) or are available upon request. Unless otherwise noted, articles may be reprinted or adapted if credit is given.

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ali@efao.ca
Allison Muckle, Northern Outreach and New Farmer Program Director
allison@efao.ca
Angel Beyde, Anti-Racism and Equity Consultant, anti-racism@efao.ca
Cassie Wever, Events and Resources Manager
cassie@efao.ca
Dillon Muldoon, Research and Soil Health Program Coordinator
dillon@efao.ca
Laura Northey, Communications and Government Relations Manager
laura@efao.ca
Martina Schaefer, Administrative and Membership Manager
martina@efao.ca
Maureen Balsillie, Small Grains Program Coordinator, maureen@efao.ca
Rebecca Ivanoff, Seed Program Manager
rebecca@efao.ca
Sarah Hargreaves, Research and Small Grains Program Director, sarah@efao.ca

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CONTACT US

Ecological Farmers Association of Ontario (EFAO)
5420 Hwy 6 North
Guelph, Ontario, N1H 6J2
Phone: 519-760-5606
Charitable number: 88074 6532 RR0001
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A Message from the Board President

A Credible Voice for Progressive Farmers

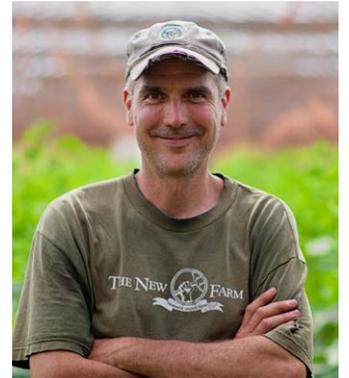
By Brent Preston

Two years ago, the EFAO Board made the decision to turn outward. For most of its 40 year history, our organization has focused inward, helping our members improve their farming methods and building community among Ontario's progressive, ecological farmers. But many of our members realized that there is only so much we can accomplish on our own farms. We all understand the importance of farming in a way that improves our environment and benefits our climate, and our members have been on the cutting edge of developing new practices to reduce greenhouse gas emissions, sequester carbon and build healthy, productive soil, but the scale of the crisis we now find ourselves in demands that all farmers start adopting these practices, quickly. EFAO members were telling the board that we needed to do more to spread ecological practices in the wider farming community.

So the board included policy advocacy as one of the pillars of our new strategic plan. We helped found Farmers for Climate Solutions (FCS), the national coalition that now includes 20 farming organizations and over 20,000 farmers, from coast to coast. More recently, EFAO began leading a mini-coalition of Ontario-based organizations to start lobbying the provincial government for more progressive agricultural policy, mirroring the work that FCS has been doing at the federal level. We hired Laura Northey as our new Communications and Government Relations Manager. Other EFAO staff dove into government relations work, including Sarah Hargreaves, who initiated our work with the Ontario Soil Action Group. EFAO reached out to so-called "mainstream" farm organizations to explain our priorities and search for common ground.

Many of these efforts have been met with success. The FCS recommendations for the 2021 federal budget were adopted wholesale, with the government committing \$260 million over two years to incentivize adoption of practices that every EFAO farmer will be familiar with – reducing nitrogen fertilizer use, expanding cover cropping, improving rotational grazing,

protecting wetlands and trees on farms, and reducing fossil fuel use. Mainstream farm organizations have celebrated these policies, and have welcomed the dialogue with EFAO. The Ontario provincial government has reacted very positively to our initial policy recommendations, and invited EFAO staff to brief dozens of senior civil servants. There has been push back at times from more conservative voices in agriculture, but the overall story is this: the EFAO is seen as a credible voice for progressive farmers, and our policy priorities are resonating at all levels of government.



Many of our members realized that there is only so much we can accomplish on our own farms. We all understand the importance of farming in a way that improves our environment and benefits our climate. Our members have been on the cutting edge of developing new practices to reduce greenhouse gas emissions, sequester carbon and build healthy, productive soil.

There is much work still to be done. The federal and provincial governments have just launched the consultation process for the next Agricultural Policy Framework (APF), the five-year, \$3 billion funding agreement that represents the vast bulk of government spending on agriculture in Canada. The new framework will launch in early 2023, and EFAO and our partner organizations must ensure that it includes support for farming practices that protect our environment and climate. EFAO will play an especially important role, as the Ontario Minister of Agriculture is the co-chair of the APF process.

This fall, you will be hearing about more ways that you can get involved with and support this important work. EFAO farmers are the innovators who have shown that we can farm with less inputs, less emissions, less impact on the environment, and more benefits for our communities. Together, we can spread our positive example. ■

Brent Preston is the EFAO Board President. He and his wife Gillian Flies own and operate [The New Farm](#), a certified organic vegetable operation near Creemore, Ontario, where they specialize in cut salads for wholesale markets.

EFAO Becomes a Living Lab – Ontario Partner

The Living Laboratories Initiative is an integrated approach to agricultural innovation that brings farmers and scientists together to co-develop, test, and monitor new practices and technologies in a real-life context. Research will focus on reducing the soil and nutrient runoff from agricultural land into Lake Erie, improving water quality, boosting soil health, and increasing biodiversity on agricultural lands in Ontario. Participating organizations will work with farmers across Canada to help accelerate the adoption of sustainable practices and technologies.

Funded by Agriculture and Agri-food Canada (AAFC) and led by the Ontario Soil and Crop Improvement Association (OSCIA), Living Lab – Ontario collaborators include the Essex Region Conservation Authority, Innovative Farmers Association of Ontario, Lower Thames Valley Conservation Authority, Ontario Soil Network, and Upper Thames River Conservation Authority.

As a partner in Living Lab – Ontario, which will run throughout the 2021 and 2022 growing seasons, EFAO is facilitating on-farm research trials focused on reduced tillage

and continuous cover. Our farmer-researchers are Brett Israel of 3Gen Organics, and Ken Laing of Orchard Hill Farm. See the Research feature of this newsletter for a Q&A with Brett and Ken.

For regular updates on each of EFAO's Living Lab – Ontario trials, you can also follow Brett on Twitter (@israel_brett) and Ken, on the EFAO [No-Till Organic Vegetable Trials](#) website page. Updates are also posted regularly on the [EFAO Facebook page](#). ■

Highlights from the 2021 Member Survey

In April, EFAO launched its first comprehensive member survey in years. We wanted to better understand the diversity of our membership, and find out how our programs and resources are meeting the needs of members.

40% of EFAO's members (276 of you) shared information about themselves, their farms, and their use of EFAO programs and resources — thank you!

The preferences reflected in the survey are in keeping with the continued increase in event registrations since EFAO switched to online-only events last year. In fact, we have already had more event participants during the first half of 2021 than we had over the entire previous year! ■

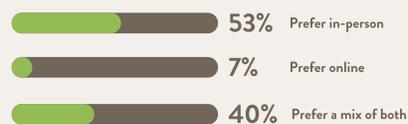
Of members who responded:



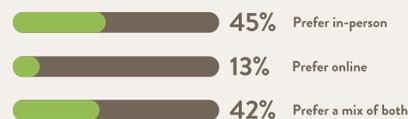
With Ontario moving into Phase 3 of re-opening, EFAO is beginning to plan some in-person events.

When asked about future events, members shared the following preferences:

Field Days:



Conference:



Workshops:



Welcome Cassie Wever, EFAO's New Events and Resources Manager

Cassie supports the educational components of EFAO's programs, and coordinates events and resources in line with the learning and training needs of EFAO's members. If you've got a great idea for a farm tour, webinar, workshop, or other educational event, please drop her a line!

Cassie grew up surrounded by farm country and Carolinian forest in Norfolk County, which fostered her lifelong interest in the connections between

ecology, food, and growing systems. She went on to complete a B.Sc. in Biological Sciences at the University of Guelph, and a Masters in Environmental Studies at York University, where she focused on farming and food systems, environmental and food education, and social justice. Cassie then spent six years creating and facilitating social justice focused experiential learning programs for postsecondary students. She is delighted to combine her love of education, food, and farming to support



a vibrant learning community among ecological farmers in Ontario! ■

Welcome Dillon Muldoon, EFAO's New Research and Soil Health Program Coordinator



Dillon supports EFAO's farmer-led research and soil health programs. He has a passion for agriculture and food systems and has a broad range of research interests including agroecology, sustainable production, community food systems, integrated pest management, and agricultural education and outreach.

Dillon holds a M.Sc. in Environmental Sciences from the University of Guelph. His research focused on agroecology, pest management and pollinator conservation in the Holland Marsh. He received his B.Sc. Honours from Trent University in Sustainable Agriculture with a focus on entomology and community food systems. Before that he completed his Red Seal in the culinary industry where he worked with regional producers to procure local ingredients for his kitchens. Prior to joining EFAO

Dillon worked at Lakehead University Agricultural Research Station where he managed variety and production research trials for grain, oilseed, pulse, and forage crops in northwestern Ontario. ■

Save the Date
For the 2021 Virtual EFAO Conference
November 29th to Dec 2nd

It's official! In 2021, the EFAO Conference will be held virtually once more.
The 2021 Conference theme is

Cultivating Common Ground

Have an idea for a conference session? Email cassie@efao.ca.

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Click on "Member Special Offers" in your online member account for details on how to redeem your discounts!

Shade of Miti

Shade of Miti is a food and climate justice organization on Treaty 13 land (Mississauga, Ontario). This organization is for communities that experience oppression from food and climate systems as well as allies and accomplices. They envision sustainable food systems in Mississauga that are rooted in sovereignty and justice, and not threatened by climate change. You can learn more about Shade of Miti at shadeofmiti.ca. The following is a Q&A with founder Rav Singh.



Can you tell us about Shade of Miti?

[Shade of Miti](#) is a farming business focused around food and climate justice. We do education and advocacy work and I farm in Caledon, using organic and climate friendly practices. I specialize in “world” or “cultural” crops — organic produce that you don’t find commonly in farmers’ markets or organic grocery stores.

Miti means soil in Punjabi. This connects me to who I am and my ancestors, and is a reminder of why I do this work. Food justice is an important aspect of my work. The “shade” part is because I’m brown and my skin reminds me of my connection to the soil. My logo is the soil texture triangle for Mississauga. The name shortens to SoM, which in farming is Soil Organic Matter. This reminds me that soil is such an

important part of my work as a farmer and community leader.

Please tell us a bit more about where, how, and what you grow.

I’m growing on rented land in Caledon. I focus on growing crops such as Chinese kale, Chinese broccoli, okra, callaloo, bitter melon, cilantro, fenugreek, and a crop trial with different varieties of African eggplants. I’m growing a lot of hot peppers too.

I decided to focus on these crops for several reasons. I’ve always shopped at farmers’ markets, and I started taking my parents and grandparents with me a year or two ago. They really liked the concept, but they weren’t able to find the foods they wanted to buy, foods with cultural importance. It’s not only white people who engage with food and food systems. I believe that everyone should be able to access local organic versions of what they eat.

It’s really important for me to use my position as a farmer to be a climate leader. Right now I’m experimenting with different types of living walkways and coverings for the soil, and trying to incorporate more renewable and sustainable energy into my farm.

Where and how do you sell your products?

I sell my products at the Erin Mills Farmers’ Market in Mississauga, and through an online store. A lot of the

community I want to connect with doesn't shop at the market. Markets tend to be more white-centric food spaces and the online store is a more comfortable option. I currently do pick up and delivery through the online store, but once COVID is more manageable I want to make connections with community hubs like health and cultural centres.

What learning or training opportunities have you found helpful as a new farmer?

I've done a lot of formal education in agriculture which I don't think is necessary to be a farmer. Recently I've been engaging with more farmer education from folks who are BIPOC or 2SLGBTQ+. I have been finding that to be more informative and relevant for my situation.

When I started farming, I had a lot of conversations with white farmers. Some were really helpful, but they don't tend to have the same experiences of taking okra to market, or growing bitter melon, for example. My biggest tip is to look for someone who has similar experiences and identities to you, or is farming in a similar way, so you can learn about the crops and techniques you need to know about.



What does it mean to you, to be an "ecological farmer"?

Being a farmer — I like to just call myself a farmer, as I think all farming should be done ecologically — is really important to me. A lot of ecological or organic practices are so important to fight our climate crisis. It's also really important to me because my ancestors were farmers in Punjab, in India, and until my grandpa they farmed using ecological growing methods. My parents were farmers during the Green Revolution and I see the harm it's caused. It's created massive problems like farmer suicides and drought in Punjab. It's important to me that I farm in a way that doesn't contribute to those issues.

Tell us about your podcast!

Yes! It's called the Lassi Revolution podcast. A lassi is a delicious drink in India. At the start of the farmer protests in India I reflected on what a revolution means to me, and realized that a revolution can be small actions that add up to change. I had also started to connect with many BIPOC and 2SLGBTQ+ farmers, chefs, and activists and I was wondering how to help more people know about their amazing work. A podcast is a way to use a platform I have access to in order to share these stories and support a revolution. The podcast airs every other Friday at 3pm on Newstalk Sauga 960AM.

What are some of the future plans for your farm/business?

I want to find a rooftop or land in or close to Mississauga to farm on. It's important for me to be in the city where I live, market, and work. I'd love to farm in Mississauga and in Caledon, and have both a rural and an urban farm in the Peel region. There's



so much potential within this region to connect urban and rural food systems, but there's not a lot of that happening right now.

I would also love to be able to sell some of my produce to BIPOC, youth, 2SLGBTQ+ folks, and newcomer communities. And give some of my produce to caterers or restaurants, newcomers or refugees who move here with some cooking background, and have them use my produce to make food products to sell. I want to participate in the full food system and the full food cycle.

I would love to have an expanded online food store, where other BIPOC farmers can sell their products, and open it up to more than food.

I also want to do more growing education. This might be something like a social media video series. I'd like to share tips for growing things that are not really included in other farming education. ■

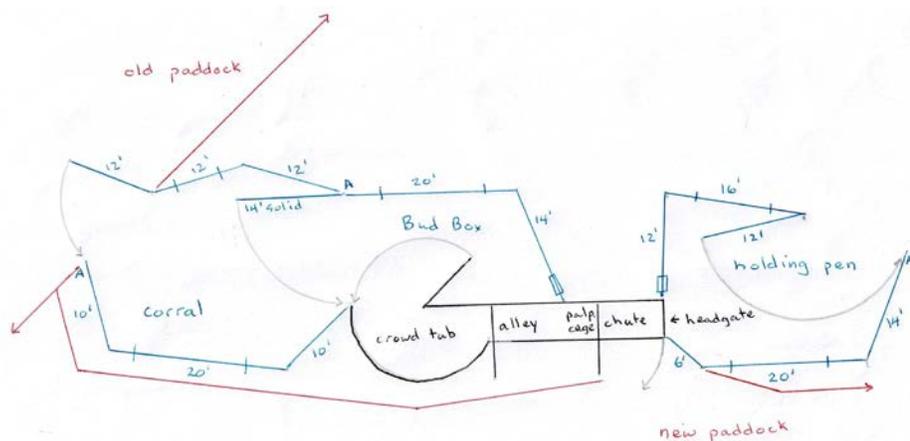
This is an abridged version of this interview. The full article can be found at <https://efao.ca/shade-of-miti/>.



On-Farm Innovation: My Take on a Portable Cattle Handling System

By Rob Campbell

Cattle are big and strong. Consequently, anything that makes them go where they don't really want to go needs to be really tough; a lot of cattle farms have fixed handling systems attached to steel posts set into poured concrete yards. Our traditional bank barn is too small and the area around the barn too hilly for such an installation, so we decided to build a portable system that could be set up on mostly flat ground.



I designed it based on principles and handling techniques from *Temple Grandin's Guide to Working with Farm Animals*, which is highly recommended for those who haven't read it. I had intended to use one of her designs from the book, but I couldn't find a trailer-mounted double file chute in southwestern Ontario. However I was lucky enough to find someone who makes a portable cattle handling system. My other stroke of luck was finding a cattle equipment dealer who had designed portable systems for other clients: Garry Smart near Meaford (you can reach him at (519) 538-4877). He spec'd the innovations needed, and worked with fabricators to manufacture them.



For temporary corrals, most farmers just chain together gates, possibly installing bolt-on feet to them. But these gates weigh over 100 pounds each and are not free standing. Gary's first innovation was feet that make the gates freestanding. The second is that trios of three gates can

be moved and positioned as a unit by a tractor with pallet forks. This results in a significant reduction in setup time and a lot less physical labour; our system is designed so that one person with a tractor can set it all up, and two people can run the cattle through it.



The gate trios are a little tricky to design so that they fold together for moving and storing, and open up the right way for using. This is part of the reason the system looks so asymmetrical. Another Garry Smart innovation is the pass-through door: a swinging door set in a regular gate (as opposed to full height "man door" gate sections). The advantage is that you don't have a heavy, separate man-door off-balancing your trio or swinging loose at one end (they usually are most handy at an end of a trio).



A piece of equipment no one sells and no one talks about are cattle anchors. The cattle will push these gates around unless they are anchored to something. Garry Smart also gave me the specs for these. My own innovation was welding the L-bracket on top so that they can be carried by a tractor with pallet forks. See the diagram for the layout.

Cattle move through the system as follows:

- Cattle are herd animals and the safest place is the centre of the herd, so the first step is to get the herd into the corral
- Next you peel off a couple animals into the Bud Box
- The peeled off cattle move in a circle which leads one or two into the crowd tub
- The door of the crowd tub has a ratchet that keeps restricting the cattle until one goes up the alley and you close the door behind it to isolate it
- If you are sorting the herd then you decide now if this particular animal will go through the headgate to the holding pen, or be let out to the right of the headgate into the next paddock
- The holding pen has a gate where a livestock trailer can pull up and load out the cattle, or the cattle can be returned to the herd in the next paddock

I had to get Stockman's Choice to modify their Portable Cattle Handling System slightly for this:

- The rolling doors had to roll away from the Bud Box,

- The chute needed to open at the sides, not the parallel axis chute they usually use, and
- I needed extra ferrules welded at the end of the crowd tub and between the palpitation cage and the alley to secure the gates to the Portable Cattle Handling System.

I got the Bud Box specs from *Temple Grandin's Guide to Working with Farm Animals*; there is a narrow range of dimensions where the cattle will respond as desired. It's important to read up on why and how it works before you use a Bud Box – I recommend Bud William's [Stockmanship](#) website, where this is explained. Unfortunately I couldn't figure out how to get a Bud Box with the right dimensions AND that would store properly AND would form a rectangle. (By the way, Temple Grandin recommends NOT using a Bud Box for sheep or goats.)



The solid gate for the Bud Box is recommended by Temple Grandin "...to help prevent cattle from turning back on the handler." Even the thin sheet of steel on my solid panel makes it crazy heavy – it needs a wheel to make it moveable. In retrospect I'm not sure it accomplishes much: the steel can't go to the top bar or you wouldn't be able to lift it with pallet forks, and I think all of my Black Angus cattle can see through that gap. But maybe it works better with other cattle or in other systems.

Areas for improvement:

- Although two cattlemen told me twenty animals would fit in the corral, half a dozen is all I can get to go in. Consequently we need to confine the cattle to a fraction of the old paddock and



walk a dead wire to get groups to go into the corral.

- You need to be in the holding pen to work on the head of an animal in the headgate.
- The gap between the crowd tub door and the far wall means you need to carefully read animals to pressure them into the crowd tub while staying behind the crowd tub door.
- The person managing the doors has a live wire nearby and there is a gap that an animal in the new paddock might exploit.

This design demands a high level of stockmanship for the person who is in a confined area with the cattle; I wouldn't feel safe working stockers through it. Also it is only portable on-farm: to move it on public roads you would need to disassemble the trios to load the gates into a trailer. ■

Thanks to our vets for design suggestions, to the Canadian Agricultural Partnership for cost-sharing, and of course to Garry Smart for making it all happen.

Rob Campbell operates [Better Together Farms](#) in Grey County, Ontario with Patricia, his wife. He left actuarial practice in 2011 to build a working example of a sustainable farm based on agro-ecology using Holistic Management.



Cell Fusion Cytoplasmic Male Sterility

How the complexities of plant botany, plant breeding, and intellectual property affect ecological growers

By Rebecca Ivanoff

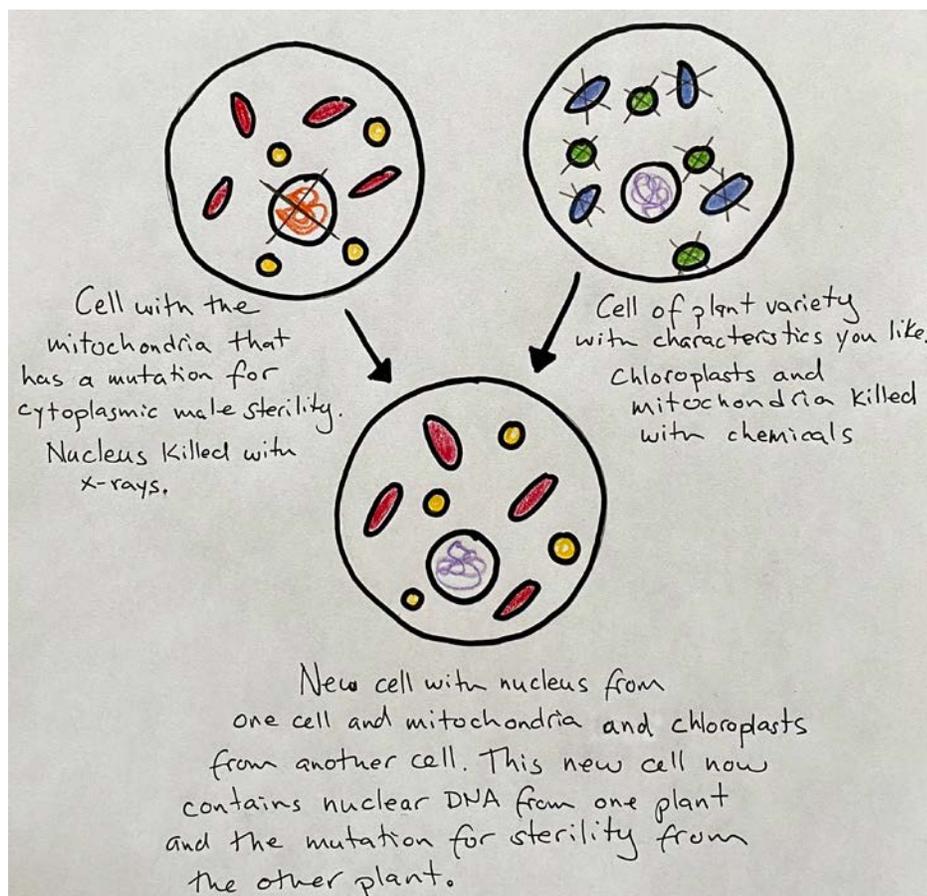
Observing the diversity of plant varieties in the garden always makes me ponder their stories. If plants and people have been doing a co-evolutionary dance for millennia, what is the story of the Quinte tomato, or the Diplomat broccoli, or the Renegade Red pepper?

Many of us have a personal connection to some varieties and their histories, while to many others we do not. More recent histories of some varieties happened in university agricultural research stations or company laboratories, but, as Indigenous seed saver [Rowen White](#) reminds us, we all descend from people who were seed stewards and plant breeders. What is our role in this continued collaboration with the plants that feed us?

Part of my work as the Seed Program Manager with EFAO is to empower growers to engage in this co-evolutionary dance, stewarding crops that flourish in ecological systems in times of climate change, and nourishing humanity's ancient relationship with seeds. However, seed work can be challenging at times. Developing an understanding of some of the complexities of seed conservation, production, and plant breeding can help growers navigate those challenges.

Hybrid seeds

Most vegetable growers select seeds from catalogues filled with hybrid varieties, which means many ecological growers use hybrid seeds. Hybrids (or F1 seed, short for first filial generation) are a cross of two highly inbred parent



CMS: Creation of a cell fusion CMS cell, based on a talk by Dr. Jim Meyers of Oregon State University, 2014.

plants. This first generation tends to grow better and produce higher yields than the parent varieties due to hybrid vigour; and these genetically similar F1 plants often have consistent ripening and appearance.

The first step to producing a hybrid is to form inbred parent lines that are highly genetically uniform, and the second is to get these parents to cross and produce F1 seed for planting. Because many plants have both pollen producing parts

and egg producing parts, in order to make the cross between inbred lines, you need to prevent the pollen from one line from fertilizing its own eggs. This can be done mechanically, such as by removing the pollen-producing parts of the plants. Because of this extra work involved, hybrids are often more expensive than open-pollinated varieties.

One way to help with the process of hybridizing is to have a seed producing inbred parent line that is “male sterile”

or does not contain viable pollen. Then, when planted beside another line, viable pollen is only coming from the second inbred parent line.

Two categories of cytoplasmic male sterility, or CMS

In some crops, creating ‘male sterile’ lines can be done using chemicals that kill the pollen, or by taking advantage of naturally occurring mechanisms. Cabbage, for example, has evolved to cross pollinate such that the pollen from one inbred line is unable to fertilize its own eggs. This is called self-incompatibility. Another way to create hybrid seeds is via one of a number of genetic mutations in the mitochondria of one of the lines that prevents viable pollen being formed while maintaining fertile ovules. This last method is termed cytoplasmic male sterility or CMS.

CMS can be naturally occurring, such as in radishes, carrots, and beets, and can also be created by a process called protoplast cell fusion, which uses chemicals or electric shocks to fuse two partial plant cells from different cultivars, species, or genera together into a single cell. The use of CMS in hybrid production greatly reduces the cost of producing F1 seed. Thus, the cost of the F1 seed made through this process can be lower.

The debate over whether cell fusion in hybrid seed production should be considered genetic engineering has caused confusion in the organic farming community. Many of us grow delicious ‘Hakurei’ turnips, ‘Gypsy’, ‘Diplomat’, and ‘Imperial’ broccoli, or ‘Denali’ cauliflower: all of these varieties are created using this technology.

Under both the Canadian and USDA organic regulations, transgenic genetic engineering (GE) is not allowed, but seed created by the cell fusion process is permitted. However, the International Federation of Organic Agricultural Movements (IFOAM) classifies cell fusion as genetic engineering and does not allow plants from this process to be used on organic farms.

Beyond the debate about whether this process should be allowed within organics, there is the issue of who is able to continue the reciprocal co-evolutionary dance.

With naturally occurring CMS there are often naturally occurring genes that restore fertility. However with cell fusion CMS, where the gene for sterility has been brought in from another genus, as is the case for Brassicas, the ‘restorer’ genes are not readily available. Therefore, the process to breed with these cell fusion CMS hybrids is complex and difficult, and likely beyond the resources of many seedkeepers. Though many CMS hybrids have desirable characteristics, these may not be available to on-farm breeders to breed with or adapt to their own regions, and this limiting of access to genetics is growing as companies breed cell fusion CMS into their currently non-CMS lines. The consequences of this are concerning for ecological and organic growers wanting — and needing — genetic diversity to select varieties for locally-appropriate characteristics, from taste, to earliness, to heat tolerance.

“We want seed for the people, we want seeds for the small seed companies, we want everyone to get into this game. We don’t want this to be only a high tech game that only the big boys can do”.

**John Navasio,
2014 Organic Seed
Conference**

How it Affects Local Breeders

The SeedWorks Plant Breeding Club, a group of small scale seed companies and on-farm breeders in Ontario, was hoping to breed a regionally adapted broccoli,



Broccoli: Munchkin broccoli is an open-pollinated variety that is being dropped by most seed companies, but that has potential in northern Ontario’s growing conditions. Evalisa McIlffaterick, an EFAO member, is learning to grow broccoli seed in northern Ontario in the hopes of working with other regional farmers to retain access to a wide variety of broccoli genetics.

but when gathering broccoli seeds for this project, they found that most new broccoli varieties are made using cell fusion CMS. They were told that even older hybrid varieties are being transitioned to contain CMS. They hope to begin collecting broccoli varieties without CMS, especially those that are likely to be dropped by seed companies, to prevent these genetics from becoming unavailable to seed savers, small-scale breeders and ultimately growers and eaters!

These non-CMS seeds and their genetics are vital resources for future breeding projects for local ecological and organic farming systems that are compatible with the philosophy and practices of resilient, just, and accessible ecological and organic farming systems. ■

Thank you to Heron Breen, Solveig Hanson, Evalisa McIlffaterick, Michael Mazourek, and Aabir Dey for helping me in understanding these issues and in writing this article. Any inaccuracies are my own.

Rebecca Ivanoff is EFAO’s Seed Program Manager. Rebecca supports farmers to learn about regional seed production, and to implement participatory variety trials and plant breeding projects as part of The Bauta Family Initiative on Canadian Seed Security and EFAO’s Farmer-Led Research Program.

EFAO's Anti-Racism and Equity Work

A Q&A with Angel Beyde, Amy Oi Ning Cheng and Ali English

Angel Beyde supports the EFAO as Anti-Racism and Equity Consultant, informed by over a decade of experience in social justice non-profit work, as well as urban agriculture and ecological landscaping.

Amy Cheng has been urban market gardening and working in community food programming since 2012, and has been supporting EFAO's equity work since December 2020.

Ali English is a settler whose ancestors came to Turtle Island from Ireland, Italy and England. She has had the great honour of being EFAO's Executive Director since 2015.

Can you please describe your involvement in EFAO's anti-racism and equity work and what motivated you to do this work?



ALI: For the EFAO staff and board, like for so many of us, 2020 and now 2021 have been years of reckoning. None of it is new — the violence perpetrated against Black, Indigenous and People of Colour (BIPOC), the ongoing inequities faced by racialized communities that have only been amplified by COVID — but for some reason, a lot of folks like

myself finally paid attention. I am sad to say that previously, I think I believed that the work of “social justice” was for specific groups dedicated to that work. But now it is clear to me that this is work that all organizations must do. Otherwise we are simply perpetuating the status quo, and all the inequities that exist, and we are only building a better world for some of us.

ANGEL: My role on the team as Anti-Racism and Equity Consultant germinated during an EFAO webinar in September 2020 when I asked a question about EFAO's plans for equity, diversity and inclusion, which had been mentioned in passing. A long-time fan of EFAO's work (as an urban grower / aspiring rural farmer), I was inspired that an ag organization understood anti-racism as relevant to their work in supporting farmers. EFAO reached out post-webinar, which led to a series of in-depth conversations and strategizing with staff, exploring how my expertise in anti-oppression, community building and mental health could clarify and strengthen the EFAO's approach.

The process has been joyful and energizing as EFAO culture is so hands-on and community-oriented, with the grassroots balanced by policy level thinking. Systemic racism is so deeply rooted in our food system, I am motivated

professionally and personally as a Black/ mixed race person to do my part to cultivate equity for all who labour to provide us with food.



“I attended the conference in Belleville and learned a lot and also was very inspired. Thank you! I did feel quite alone as I was one of the only BIPOC attendees out of a sea of white farmers/members. It felt like the other farmers had the privilege of generational connections and networks and already knew each other or at least felt comfortable with each other. I tried my best, but definitely had a lot of anxiety during the networking/social parts of the conference. I loved the workshops and appreciated the two Indigenous led workshops. I think more BIPOC led and focused workshops/socials will be so helpful.”
BIPOC survey respondent



much *more thriving* could happen if there were less barriers and more resources.

What do you feel like you have accomplished so far? What has been most rewarding in this work?

ANGEL: It's been super inspiring to do outreach, nurturing dozens of new connections within the BIPOC growers community and to introduce new EFAO members to the organization and other helpful resources. I love that kind of match-making and pollinating! My vision of Anti-Racism and Equity work inoculating every aspect of EFAO's offerings and systems has been received with enormous enthusiasm and roll-up-our-sleeves energy. We've planned, seeded and are nurturing a wide range

- Synthesizing and presenting the BIPOC Farmers' Survey responses to EFAO staff and board. Results will be shared publicly soon;
- Helping to draft the Terms of Reference for the BIPOC Equity and Accountability Committee;
- Providing prototype feedback for a BIPOC map and directory;
- Collaborating with Angel to connect the BIPOC growers community and engage them in EFAO's work.

I am always excited to connect with any farmer(s) over common interests and a passion for growing, but it's been especially meaningful to connect with growers who can relate to specific cultural interests or my POC experiences. At recent BIPOC meet-ups, others have also expressed the soothing effect of being culturally seen and heard. It's fun seeing nods or smiles across my zoom screen when people are sharing culturally-specific anecdotes about food, family, production interests, etc. I am grateful to support these meet-ups since relationship building is foundational for collaboration and achieving collective impact.

AMY: I started supporting this work in December 2020 by helping Angel and Ali with the first BIPOC farmers' meet-up. Since then, I have been supporting the development, coordination, and implementation of a range of various equity initiatives. I am motivated for this work because of my identity and experiences as a person and farmer of colour, and because of my work in the last 10 years doing market gardening and community food programming with racialized communities in Toronto. My own farming journey was sparked by my passion for growing culturally significant Chinese vegetables (as an incubator farmer operating Red Pocket Farm) and a desire to feed communities underrepresented in the local food scene. From witnessing the social injustices experienced by my immediate BIPOC community (family, friends, colleagues, program participants, etc), and from continuous learning about historical and current events, I want to do my part in supporting more equity, ease, peace, and prosperity for BIPOC communities. Despite systemic challenges, I already see amazing community-caring and innovation within BIPOC communities that I am a part of, but I imagine how

"I have been turned away for traditional lending and have had to seek out micro loans and grants to carry my business along. I have had to pick up a second job to cover farming expenses which takes me further away from my dream of farming fulltime to support my family."
BIPOC survey respondent

of initiatives, with more to come: the new BIPOC Farmers Network (nearly 70 members and growing); BIPOC contributors to every issue of the print publication, hosting webinars, speaking at the 2021 conference and other events; a fall Farming For Justice webinar series for white settler farmers; developing a broad scale Land Access Coalition, and more. It's been rewarding to be of service in a tangible way to increasing equity and opportunities for the BIPOC growers community.

"If we do not acknowledge the real history, how can we acknowledge our place (and role) in our present day agricultural & food systems? And if we do not know our role and place in the system, how can we change it?"
BIPOC survey respondent

AMY: It has been meaningful to support EFAO's current equity efforts and contribute ideas for upcoming events like BIPOC board recruitment processes and 2021's conference planning. A few highlights to-date include:

ALI: One of the most rewarding parts of this work for me has been working with Angel and Amy and learning from them how they think EFAO could be approaching anti-racism and equity work, and better supporting members who have been underrepresented in the organization. Building new relationships with Indigenous and racialized members and partners feels like very meaningful and essential first steps. The staff team has also been reading the incredibly inspiring and insightful book *Farming While Black* by Leah Penniman, and having honest and difficult conversations about our histories, unconscious behaviours, and what reparations and reconciliation means to us; and these feel like really important conversations.

What challenges are you facing in moving this work forward?

AMY: The things that I find challenging are common to anyone wishing to impact systemic change. It can be hard to focus and prioritize when the causes and solutions to inequity involve many important intersectional issues. Progress can feel slow and small, relative to the enormous systems of disproportionate power and wealth being confronted — so staying optimistic can be hard. But this speaks to the need for collaboration in solution building, the need to support one another for the long haul. On this note, collaboration presents a good kind of challenge for both individuals and organizations, since it requires a ton of empathy, listening, patience, courage, humility, grit, honesty, checking of one's privileges, sharing. This work challenges us to show up as our best selves as much as possible.

Less philosophically speaking, land access and capital continue to be age-old and ongoing related barriers for farmers, and I look forward to working with others on these issues.

ALI: From where I sit in my role as Executive Director of EFAO, I see the major challenge being the fact that EFAO has historically had a membership and leadership that has been predominantly non-racialized. Mostly white settler farmers and individuals. Becoming a more diverse and inclusive organization takes time — we need to first build relationships and trust. Including a greater diversity of voices and perspectives in our educational events is an important first step, but ultimately we really need to have representation from Black, Indigenous and people of colour on our board and

staff, as well as in our membership. These are the folks who will really know what barriers and challenges Indigenous and racialized farmers face in pursuing

"Imagine if we had a framework for getting more people access to land and (modest and sustainable) housing and infrastructure, with walking distance community and mentor-ship, putting way more people on the land in diversified farming systems — as a Toronto kid (BIPOC or not) that would have allowed me to get into farming 10 years earlier than I actually was able to; on top of how many systemic issues that would help solve."

BIPOC survey respondent

ecological agriculture and how to best provide support.

ANGEL: The scale of effort needed to move the needle on the land access and climate crises, which feels central to this Anti-Racism and Equity work, can be overwhelming. Having a personal stake in this (I am looking for land to

start a market garden farmstead) is both motivating and at times very tiring. That said, these challenges are also incredible opportunities for restorative connection and collaboration between groups and individuals to overcome barriers related to the commodification of farmland and restoring historically excluded groups (i.e. BIPOC) to an equity position in agriculture. Being part of the Equity team at Farmers For Climate Solutions has been a great experience and a model for what we can accomplish when we pull together. Breaking down silos across sectors is powerful.

What next steps are on the horizon? What feels most urgent or exciting?

ALI: I think the most important next step is continuing to bring a greater diversity of voices to our board and eventually our staff team. The formation of a BIPOC Equity and Accountability Committee is a really exciting next step, as it will help inform and steer this work, and hold us accountable to our goals and progress. And we plan to have a call for new board members this fall, and I can't wait to see

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who might be interested in joining, and what skills, perspectives and passions they will bring to the board and the organization as a whole!

AMY: In addition to tackling social justice issues, addressing the climate crisis feels the most urgent.

ANGEL & AMY: One of the many things we're excited about is the new BIPOC Equity and Accountability Committee. Having a group of diverse BIPOC voices engaging with EFAO in an advisory capacity is key to advancing equity in the organization and its programming. Adding BIPOC board members feels significant for similar reasons. Lastly, watching the progress-to-date with EFAO's equity initiatives flourish since December 2020 is amazing; the work has been approached with a lot of thoughtfulness and care from everybody. It's really nourishing to feel so many connections developing like mycelium through the forest soil. A strong foundation is being established for greater things to come.

Are there any other organizations or initiatives that serve as inspiration for EFAO's work?

Supporting EFAO's equity work has inspired us all to expand our horizons a bit and explore the work of other farming / food justice organizations. Among them:

- FoodShare Toronto's strongly equity-driven organizational structures, policies and practices
- The Groundswell Center for Local Food and Farming's Equity and Accountability Committee
- Amy attended NOFA-NY's 2020 conference, and really enjoyed some of their online conference tools and features

- The extensive BIPOC farming advocacy work by Soul Fire Farm and The Northeast Farmers of Colour Land Trust
- The breadth and depth of programming by the Practical Farmers of Iowa in everything from

**"Well, land and capital go hand in hand. I do not come from a family that had any capital so it has been difficult to accumulate the amount of capital necessary to purchase land."
BIPOC survey respondent**

technical skills, to policy, to land conservation and farmland transfer, to farm finances, etc.

AMY: From my time working in urban agriculture in Toronto, I learned so much from a multitude of grassroots organizations and individuals. A critical lesson is the importance of listening to community needs, and allowing communities to shape and lead the work, since they best understand what is needed. This has great relevance to EFAO's equity work. Given EFAO's existing "for farmers, by farmers" programming, we already see how community-driven programming can yield effective practical results, so I feel optimistic about the EFAO's current and future efforts to integrate an equity lens into its work. ■

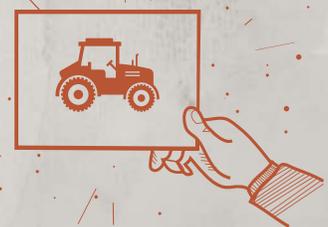
Since December 2020, much work has been done to "prep the ground" for addressing systemic racism and equity in agriculture. The "mycelium" network of EFAO BIPOC farmers continues to grow, and many new ideas and questions have been seeded – some have already germinated and are being nurtured towards fruition. We are very excited and grateful to be working within such an engaged and caring membership.

You can learn more about EFAO's progress with its anti-racism and equity work at efao.ca/anti-racism. The quotes in this article are excerpts from the survey results. If you have any questions for Angel (anti-racism@efao.ca), Amy (amyoncheng@gmail.com) or Ali (ali@efao.ca), please don't hesitate to reach out!

How to Place a Classified Ad

Send your ad (up to 40 words, plus contact info) to admin@efao.ca. Classifieds are \$15 for EFAO members and \$25 for non-members, and \$0.25 per word above 40 words.

Classifieds also appear on the Opportunities page of the EFAO website.



New Collaborations: Farming a Living Lab



Ken Laing of [Orchard Hill Farm](#) and Brett Israel of [3Gen Organics](#) are EFAO's member-collaborators on the Living Lab - Ontario initiative, in partnership with Agriculture and Agri-Food Canada (AAFC) and several other organizations. Here, Ken and Brett answer questions about their involvement in the initiative, what it's been like so far, and what they hope to accomplish with their research.

EFAO: What does your Living Lab trial seek to demonstrate or discover?

KEN: We're trying to develop effective no-till systems for organic vegetables. Developing a horticultural system for vegetables with no tillage is very challenging because we often use tillage to terminate one crop and get another established, and then we come in again with tillage to control weeds. But hopefully we can at least reduce that, even if we don't eliminate it completely.

BRETT: As a certified organic farm, we are always looking for ways to embody the spirit of the organic standard. We have to reconcile the benefits of organic and regenerative agriculture with the need to manage weeds. In most organic systems, tillage is the main tool. It's less of an issue with corn or small grains, but it's a big issue with soybeans. We want the least amount of tillage possible, but that's a challenge, so this project compares three different ways of doing that.

EFAO: Describe the design of your research.

KEN: I actually started this work last year, so each year I've probably had 40 to 50 different plots. They are relatively small, but they are all designed around a mechanized 60" bed system that would be typical of a mid-scale organic market gardener. There are quite a wide range of strategies that we can trial, which means there is a large number of plots. Once we find something that seems to be working, we want to replicate the trials so that we can be more confident that the yields and soil impacts are going to be consistent.

So 2020 and 2021 have been the survey years where we look for promising

techniques, and next year we will replicate the trials that are working, particularly in garlic and potatoes, which seem quite promising.

In addition to that, there are researchers who are looking at more specific outcomes in some of the plots, like how different growing systems affect the diversity of certain beneficial insects and pests.

BRETT: In addition to the usual method of using tillage to control weeds at several points throughout the season, we have three different soybean cropping systems we're trialing. In one area we are double-cropping soybeans following a winter barley crop. As we continue to have more frost-free days, winter barley is becoming a more legitimate crop to grow, and we're having success with that. If we can harvest it in early July, we have time to seed some beans afterward. And because the barley has drawn the nitrogen out of the soil, that creates a less hospitable environment for weeds in the beans. So we seed the beans into the winter barley stubble after working it up once, and there is no tillage from then until harvest.

The other approach is a cereal rye-based system. In one area we seeded cereal rye in the fall and used a roller-crimper to terminate the rye and then plant the beans into the crimped rye. That's true no-till organic beans. In the third plot, we harvested the cereal rye for green forage, and then worked the field once, and seeded our beans in there.

EFAO: What have you learned so far? Why is it interesting and how will it help other farmers?

BRETT: At this point, one of the best takeaways is the importance of ground cover for reducing erosion and keeping life in the soil but also as a real tool in weed control. Particularly for the problematic perennial weeds like Canada thistle. It's been pretty clear that the systems where something is in the ground over the winter have less weed pressure in the springtime. It makes sense because it was seeded in the fall early enough to offer competition for the weeds. And this year we had growing conditions in March, so basically if there wasn't anything there it would have been growing thistles, but the cover prevented that.

KEN: We've learned a lot, but one example was trying to roll living crops like rye and vetch or oats and peas and then directly planting into them. We've discovered that this is really challenging for certain crops. In some cases there has just been no production, so you know, not really acceptable! This year demonstrated that you want to have your soil in a good healthy state before you even try no-till and that adding fertility at planting time or sidedressing later may be necessary for good production.

We've also learned quite a bit about deep compost mulch (DCM). It works pretty well, but you have to be careful that there are no weed seeds in your compost, and that you already have good weed control in the plot, or the weeds can come back to haunt you. DCM has proven to be a really successful technique, and I think it's particularly applicable for new farmers who are starting out, or on a piece of land that isn't very fertile. DCM isn't cheap, unless you're making it yourself, but it



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could really help bring new or poor land around into production fast.

EFAO: What challenges have you faced so far?

KEN: We purchased a no-till transplanter, which was relatively easy to find because conventional no-till is common enough now. But it had trouble handling all the residue from the rolled cover crops, and organic no-till requires a lot more residue. So the transplanter required a lot of modification. Luckily that's right up my alley, but that might not have been easy for anyone.

What was neat was that once modified, we were able to get it to plant no-till potatoes and garlic as well, even though it might not have been the most ideal tool for the job. And it did plugs too. So

we were able to use that transplanter for three different jobs, and that's important for a 14 thousand dollar piece of machinery.

BRETT: When it came to seeding the soybeans following cereal rye, we had a seedbed prepared, and we drove in the beans, but we didn't have the right tool to get them deep enough into moisture, so we had a poor population. We ended up borrowing a different drill from a neighbour to reseed and establish a better stand. Hopefully we can plan around that next year. Fortunately the stand looks good right now, so I think re-seeding was the right decision, even if it was a little more costly. I think it'll pay for itself.

EFAO: What do you hope to achieve by the end of 2022?

BRETT: My goal by the end of 2022 is twofold. Number one would be to collaboratively come up with an improved understanding of how we can best manage soybeans while reducing tillage in an organic production system and add to an understanding of how those management decisions impact the various metrics around soil health and the vibrancy of our soil ecology. Second would be to create relationships and hopefully establish a new benchmark

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for co-development research that can serve as a starting point for a lot of other creative inquisitive folks to work together and build a better farm system for everyone.

KEN: There definitely seems to be a lag in development or stunting of growth when you're planting into no-till conditions. Vegetable roots seem to have difficulty exploring the soil for nutrients, so they lag a little behind other crops. This has been noted as well in no-till field crops, that they're slow to emerge. But they can catch up and often do yield just as well as other crops, depending on the situation. So one thing I want to achieve is to demonstrate that despite the lag, no-till is still an effective method in horticulture and can work on a larger scale.

If we can show that some of these strategies work reasonably well then that's something someone can try out, even on a small scale on their own farm, with a little less risk. A lot of farmers could benefit from having a leg up in using these strategies or knowing where to start.

EFAO: How do you feel about being in the spotlight?

KEN: We've been the subject of many articles, videos and things like that over the years, and I taught the EFAO soils course for a number of years, so we're alright with it. It's extra work for sure, and it means I'm not really retired, I'm just as busy as ever — it's just a different kind of work.

BRETT: I guess I kind of like it! It's really not about us so much as it is about the philosophy and the concepts and principles. So it's exciting for me to see not just folks in agriculture showing a real interest in how we manage the land and our interactions with the natural world as a major contributor to our health and that of our planet.

I think it's kind of incumbent upon us to do what we can to advance the cause. This is an equity concept as well. I am fortunate to be in a position of having an established family farm business and there has been the capacity to grow and expand that, so because of our privilege we have a responsibility to take on risks and try different techniques because if it is a failure we are in a better position

to weather the storm than other folks might be.

EFAO: What aspect of doing this research are you most excited about?

KEN: Well, garlic and potatoes are both crops that usually require a lot of tillage and leave the soil in pretty poor shape, so if we can get rid of some of the tillage in those two different systems then that's pretty significant. The number of acres of garlic grown in Ontario isn't huge, but if we could develop a no-till organic potato system, that could have a huge impact on a lot of acres across the country, so I'm pretty excited about that.

BRETT: I'm just really excited about challenging the established way of thinking about growing organic beans. I have grown to have a fair bit of disdain for them because I know how much tillage is involved and they really aren't paying their carbon rent! It might take some extra thinking and work at the outset, but if we can get to a place where we get some pretty interesting outcomes, that's great. That's what I'm most excited about — finding those outcomes together. ■

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OCO Releases Report on Regenerative Programs and Incentives

In May of 2021 the Organic Council of Ontario (OCO) released their [Regenerative Programs Feasibility Study](#). The study explores various 'regenerative' agriculture certification and verification programs and their role in the Ontario marketplace.

The growing demand for climate-friendly 'regenerative' products that are backed by evidence of ecological improvements has led to programs like the [Regenerative Organic Certification \(ROC\)](#), the [Ecological Outcome Verification \(EOV\)](#), and the [Soil Carbon Initiative \(SCI\)](#). OCO's report compares these programs and analyzes their potential for climate impact in Ontario and the steps to adoption by producers.

Regenerative agriculture is a term used to describe agriculture that not only sustains ecological health but improves it over time. Though many farmers have aspired to achieve some version of this goal for decades, the term 'regenerative' has gained traction in recent years in association with the potential to mitigate or even reverse the effects of climate change by adopting climate friendly growing techniques which promote building healthy soil and encourage ecological diversity. Despite that, no clear or specific definition exists which catalogues a complete list of practices and techniques.

The purpose of this study was to examine the various programs currently emerging on the market that attempt to measure, certify and verify regenerative and regenerative organic agricultural practices and outcomes and their potential for adoption. Programs assessed include the Regenerative

Organic Certification (ROC), the Ecological Outcome Verification (EOV), the Soil Carbon Initiative (SCI) and more. The report compares and summarizes each program and its potential barriers, benefits and implications for Ontario's producers and consumers.

What are regenerative certifications and verifications?

Regenerative certification programs vary in their approach, but most measure or quantify similar ecological attributes of a farm, including increasing soil health and carbon sequestration, biodiversity and ecosystem health, increased animal welfare, economic resilience and some also include worker fairness.

Some programs, such as the **Regenerative Organic Certification (ROC)**, build on organic standards. The ROC, which was initially developed through the Rodale Institute, uses organic certification as a baseline, and incorporates additional existing certifications for things like animal welfare and worker fairness in a tiered system, to avoid duplication. Although a farmer may achieve bronze, silver or gold status, the program provides an overarching label that aims to incentivize and communicate the highest standard for certifications currently available.



Others take a different approach, instead focusing on outcomes rather than standards-based practices, like the [Savory Institute's Ecological Outcome Verification \(EOV\)](#) and its Land to Market label. The EOV is based on measuring the outcomes of good land stewardship, specifically focusing on soil health metrics to verify positive practices and communicate that to consumers. Where this program proves to be strongest is its potential for customization. Progress is measured against a baseline of initial data and observations collected from the participants' specific land plot, and compared with an established local reference area. In general this program measures continued land regeneration and ecosystem improvement through various metrics and individual assessments.

Other programs that depend on self-reporting through online platforms are also in the works, including the [Soil Carbon Initiative \(SCI\)](#) and the [Canadian Agri-Food Sustainability Initiative \(CASI\)](#), both with the goal of

communicating best practices across the value chain while boasting flexibility and usability for producers. Both programs are currently in their beginning stages, but they are expected to be launched within the next few years.

Carbon markets and the software tools that help to measure carbon capture, as well as brand driven regenerative initiatives like that of General Mills 1 Million Acres Initiative are explored in OCO's report as well.

Feedback and Findings

OCO conducted surveys with consumers, producers, processors and retailers as well as interviews with industry experts and focus groups to better understand the landscape surrounding the demand and market for regenerative programs.

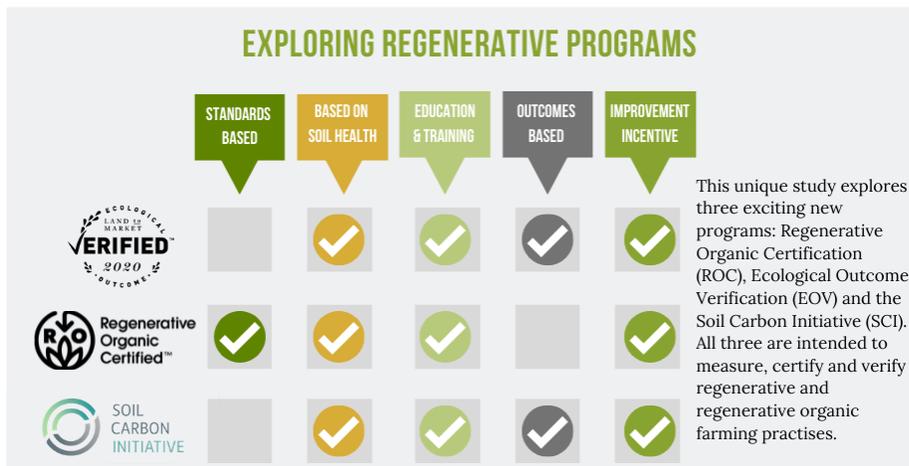
Consumers expressed a desire to support more climate friendly food production, with 86% of survey respondents indicating that they were very likely or more likely to purchase products with a regenerative label if regenerative practices could help reverse climate change. The majority of survey respondents also believe that societies' food purchasing decisions affect climate change. Retailers indicated that they would seek to use or carry the regenerative label.

Producers seem interested in programs that not only translate to additional price premiums but also help to measure and grow soil health, biodiversity, and environmental and economic resilience on the farm. Of producer survey respondents 91% indicated yes or maybe when asked if, when regenerative certification/incentive programs became more available, they would consider applying.

What are the barriers and benefits?

Among the significant barriers to adoption of these programs are time, cost, and a lack of resources and education. Without widespread adoption and recognition of these program labels, these programs will do little to provide a significant market incentive to Ontario producers.

REGENERATIVE PROGRAMS AND INCENTIVES FEASIBILITY STUDY REPORT HIGHLIGHTS



All of these programs have one thing in common; their ability to aid producers in making important management decisions. The need for accurate record keeping and monitoring of the land's health helps to build connection with the land and awareness of how farming activities impact it. The diligent records and observations required may be highly valuable management tools that demonstrate progress over time and potentially highlight the need for changes or improvements.

Do these programs compete with organic certification or each other?

Programs measuring regenerative and regenerative organic practices can certainly exist alongside organic certification, or as mentioned above, organic certification can act as a baseline requirement. Both the ROC and EOV have officially stated they are not in competition with one another, but working towards the same goal to provide producers with the ability to communicate practices that may not be measured in organic certification. In fact, some producers are taking part in multiple programs at once, participating in both ROC and EOV simultaneously.

What purpose do these programs have?

Is there a demand for regenerative certification programs? One thing to be sure is the need for an increase in climate friendly agriculture in Ontario, and the world. Programs that measure and certify are a clear way

to communicate positive practices, especially when products are not purchased directly from the farm. In theory, programs that incentivize climate friendly practices and outcomes should help to increase beneficial practices. Campaigns targeting consumer awareness of the positive effects of regenerative and regenerative organic practices will drive the demand and market for more climate friendly products, possibly moving the needle in the right direction to capture agriculture's potential to help reverse climate change.

Regenerative and organic are both about finding a better way to produce food – one that helps our climate and communities. But different programs go about this in different ways. Regenerative programs can complement and strengthen organic; that's why we're exploring their potential here in Ontario. ■

Stuart Oke is the Communications and Membership Manager at Organic Council of Ontario and a co-owner of Rooted Oak Farm in North Augusta, Ontario.

The Organic Council of Ontario (OCO) is the voice for organics in Ontario. They are the only full value chain organic association operating at the provincial level. They represent over 1300 certified organic and uncertified ecological food producers, as well as the businesses, organizations, and individuals that bring food from farm to plate.

Creative Farmer-Researchers Host “Living Labs” with IFAO



by Mel Luymes

The Innovative Farmers Association of Ontario (IFAO) is pleased to be working alongside EFAO on the Living Lab–Ontario initiative. Between our two organizations, we have connected researchers with some of the most creative and passionate farmers in Ontario, so that scientists can do practical research in a ‘living laboratory.’

These ‘labs’ are unique, with different soil types, different management, and research objectives developed by the farmers themselves. The IFAO’s farmers include Greg Vermeersch (VanMeer Farms, Tillsonburg), Michael & Lindsay Groot (Wholesome Pastures, Crediton) and Laurent & Catherine Van Arkel (Van Arkel Farms, Dresden). They join EFAO’s two collaborators, Ken Laing and Brett Israel, along with a few other sites.

Living Lab–Ontario is one of four projects across Canada in the Living Laboratories Initiative. The Initiative is a new approach to agricultural innovation in Canada that brings farmers, scientists, and other collaborators to develop

and test innovative practices and technologies. Living Labs’ focus on developing innovative farming solutions to combat environmental issues related to agriculture, such as climate change, soil health, and water quality. What our farmers and researchers learn through Living Lab–Ontario will be shared with farmers and scientists across Canada.

Now, let’s meet the IFAO’s farmers!

VanMeer Farms

Greg Vermeersch runs a large grain farm in the Tillsonburg area and has been innovating with cover crops and no-till/strip-till on his sandy ground. For his project, he is looking at double-cropping winter barley and soybeans. On one side of his field, he planted the winter barley in twin 30” rows last fall and planted soybeans (at two different populations) between the rows in late April. He harvested the barley, while blocking the cutter bar on his combine to save the beans and let them grow on to harvest.

On the other side of the field, he planted the barley as normal and will be planting soybeans into the barley stubble *after* harvest. He is curious to know which is more practical and cost-effective, and what are the agronomic effects of inter-planting the two crops.

Wholesome Pastures

Mike Groot farms near Crediton and, along with his wife Lindsay, runs Wholesome Pastures. Soil health is the core of their farm, as they make the link between it and human health. For them, building soil health means pasturing livestock and using regenerative grazing techniques.

Mike is running a replicated trial of 80-foot strips of corn, soybeans, wheat and pasture that he rotationally grazes with cattle. He is comparing field crops with cover crops and grazing to pasture, to better understand the economics, practicality and soil health benefits of the two systems.



Greg Vermeersch

Both raised on conventional farms, Mike and Lindsay have broken out of the box (coop?) and have gotten creative with pasturing their animals, even running chickens through cover crops between 60” corn. They direct-market their beef, lamb, chicken, duck, eggs and honey, and offer nose-to-tail ground beef, along with other products that make full use of the animal, including natural soaps and lotions, leathers and hides.

Woody

Laurent Van Arkel, known as Woody to most in the IFAO, is past President of the IFAO and co-founder of the Ontario Soil Network. He grows corn, soybeans, wheat and sugar beets just south of Dresden and has been working on farming with less tillage and more cover crops for years. He has worked with researchers before, including hosting Dr. Ralph Martin and some graduate students from the University of Guelph.

Woody’s research plot for the Living Lab–Ontario initiative is really pushing the envelope, as he is experimenting with perennial cover crops in corn, soybeans, wheat and sunflowers. He strip-tills or band-sprays a ‘farming strip’ in 30” rows into a cover crop. He then tries to keep the cover crop back without killing it through his row-mowing unit.

This will be his third season attempting to make it work. So far, he has seen the cover crops be too competitive with the cash crop, but thinks a dwarf clover might do the trick. He is also interested in a subterranean clover that he has planted this year, which stays very low to the ground, not moving into the farming

strip. This clover isn’t perennial, but it is perpetual because it constantly re-seeds itself.

Woody’s Living Lab field features side-by-side comparisons with no-till corn and corn in perennial strips with two types of clover. He soon hopes to work with Haggerty Creek and the RoamIO HCT unit to have his cover crop rows mowed by a robot!

“In many ways, we are going back to our roots with this initiative,” says Mark Richards, President of the IFAO. “We are looking forward to collaborating with AAFC scientists as we are all pushing for solutions for soil health. None of our organizations can do it alone, so collaboration is the key to getting all the right expertise at the table.”

The IFAO and EFAO are collaborating on Living Lab–Ontario project outreach, so stay tuned for more details about how we will be working together this winter conference season! ■

In the meantime, please follow our farmers on social media: Greg is on Twitter @VanMeerFarms and on TikTok @gregvermeersch, Mike & Lindsay are on Instagram @wholesomepastures and Twitter @onParrMike and Woody is on Twitter @woody_VA and IFAO is on Twitter @IFA0123.

Mel Luymes is a freelance agri-environmental sociologist, whose family farms near Drayton, ON. She’s working with the Ontario Soil Network, as well as the IFAO, doing communications on the Living Lab project.



Mike and Lindsay Groot



Laurent Van Arkel, known as Woody

Topic: Unlearning

Unlearning Deadlines

Deadlines and I have always had a special sort of relationship. The one that comes with being a hopeless procrastinator mixed with a fierce streak of anxiety that can lead to some pretty imaginative catastrophizing when things don't get done "on time". That was okay when I was a student, where I could always count on some of that last minute energy to complete an assignment, and in the end it was only grades I stood to lose if the deadline was unmet.

When I entered the world of farming things weren't so simple. Suddenly, I was juggling over 30 kinds of vegetables, each with their own unique deadlines to seed, transplant, weed, protect from bugs, harvest, cure, and so on (and on). And there was a lot more on the line now

too — this was my livelihood. Worse, customers had paid me ahead of time for these veggies, and they were coming for them. They were coming for them every Thursday. At 4pm. For 18 weeks in a row.

If I had known what I was getting myself into, I should have been more scared. However, my farming partner had a more casual relationship with deadlines. We soon had a running joke about our taglines.

Mine (anxiously): "Are we going to get it done on time?!"

His (relaxed): "It shouldn't take too long."

Over the years, I've done a lot to manage our deadlines. Meetings, schedules, reducing our offerings, improving

our techniques and increasing our efficiencies in every place I can.

But I am slowly coming to terms with the fact that in farming the endless parade of deadlines cannot all be met. And I need to unlearn my obsession with meeting them, for the sake of my own mental health. Because no matter how tight our schedule and how efficient our workflow, we are at the mercy of nature, and, well — life. Some deadlines we meet, some of them we don't, in an eternal to-do list that starts again each season. Maybe it's ok that the onions went in too late, that we're short spinach for the

CSA due to a weeding we never got to, that the lettuce is too small to transplant, or that our peas grew too big before we got around to trellising them. Somehow despite it all we always manage to get veggies to our customers every week. And despite all my worrying, we have always met that 4pm Thursday deadline.

Kim Barker
[Mulberry Moon Farm](#)

Farmers Write is an opportunity for EFAO members and friends to share real-life short stories or poetry on topics inspired by life as a farmer.

Farmers Write topics are intentionally broad — please feel free to express in a way that makes sense for you and your story. We aren't as concerned about style and perfect writing as we are about great stories or ideas that others might find truth in. We suggest 250 to 300 words but are happy to help edit, or consider a longer story. We are able to publish stories anonymously if that helps you to be freer in your writing.

To submit your story, please visit efao.ca/farmers-write or send your typed, double-spaced submission to: EFAO 5420 Hwy 6 North, Guelph Ontario, N1H 6J2.

Please include your email address and phone number. If you cannot type, please print clearly.

Upcoming Topics

Winter 2021 – Very Neighbourly
Deadline October 15

Spring 2022 – Transitions
Deadline January 15

Summer 2022 –
Stories our Grandparents Told
Deadline April 15



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We Are Each Other's Harvest

Celebrating African American Farmers, Land, and Legacy

By Kosi Agamah

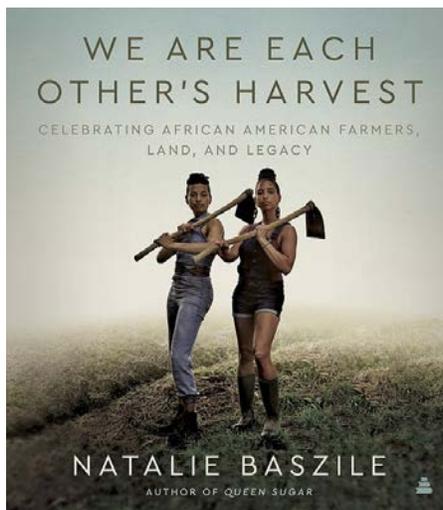
When I first picked up this book I had no clue what was in store. In this impressive anthology, Natalie Baszile brings together essays, poems, photographs, quotes, conversations, and first-person stories to examine black people's connection to the American land from Emancipation to today. As a Canadian embarking on my way to finding my forever homestead and birthing The Black Pearl Farm, this book helps acknowledge where we have come from and encourages me to continue.

Black farming informs crucial aspects of American culture and, if I'm honest, I didn't see its connection to Canadian culture until I read this book—the family, the way our identity is bound up with the land, the healing power of food, and race relations within Canada.

As a Canadian growing up in Alberta, when I thought about farming I thought about Indigenous peoples and White people. I never saw myself. However, when I would travel home to my mothers home in Guyana I saw Black Farmers everywhere. My mother grew up on a farm. Black people always had a deep connection to the land and I felt a pride because the land was finally calling me home.

We Are Each Other's Harvest was my welcoming. It elevates the voices and stories of black farmers and people of colour, celebrating their perseverance and resilience, while spotlighting the challenges they continue to face.

A year ago, these conversations, books, conversations on tenant cropping and food sovereignty were not at the forefront. They have since exploded into the public consciousness. I celebrate each person's story and that is exactly what this book offers. It feels like a



breath of fresh air and a spotlight rightfully earned.

In the 1920s, there were over one million black farmers in North America; today there are just 45,000. I like to say 45,000 and 1 because I now count myself in these numbers. Baszile explores this crisis through the farmers' experiences. In their own words, middle-aged and elderly black farmers explain why they continue to farm despite systemic discrimination and land loss. The book brings to light early images of black farmers and gardeners, and the connection they have to the land in the face of so much struggle. This book offers a sense of inspiration and pride.

In the "Returning Generation," young farmers are being welcomed home. I cannot sing more praises for this book. When I first decided to farm I couldn't think of any Black Farmers within Canada. Searching for them was difficult and finding safe spaces to learn and those willing to teach felt almost impossible.

This book allows the reader to celebrate holders of knowledge and give us the tools to build upon their legacy. We

are offered a chance to connect with ancestors, and read about the challenges they face as they seek to redress issues of food justice, food sovereignty, reparations and land access. This book offered a counternarrative to what the dominant narrative offers of Black farmers.

The New Generation is here and unapologetic about holding space and representing hope with the resources we have. Those like Bounty & Full, Sundance Harvest, Luckybug Farms, Shade of Miti, Wayward Farm, Toronto Black Farmers, and Happy Acre Farm are dreams & prayers fulfilled. They show us on how land can save, land can encourage, and how farming can build communities and offer healing. A synergy between the young and old, the tech savvy and the not so savvy, across borders and culture lines. Individually we are vulnerable, collectively we have power and we are standing within that power, in the pages of this book.

We Are Each Other's Harvest is a reminder to weave the untold truth of Black Farmers back into the story and with the allies who welcome, encourage, offer land access, offer help and resources, we say Thank You. ■

★★★★★ out of ★★★★★.

Kosi Agamah is the force behind @TheBlackPearlFarm, a new passion project she is growing by playing in the dirt and birthing something spectacular. She believes everything is better when it's done with the heart and that is why she has taken time to educate herself on the importance of sustainable farming, food justice & security, on what it means to be a new farmer in Ontario and a BIPOC farmer at that. Currently she is in search of her forever homestead, and is growing alongside BlackFarmersTo in Halton, ON.

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