



# AGROECOLOGY

FIELD SCHOOL AND RESEARCH SUMMIT

## Building an Agroecological Movement in Canada:

Report from the 2018 Agroecology Field School  
and Research Summit

August 16 - 18, 2018

The land on which we gathered is the traditional and unceded territory of the Algonquin nation.



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# Overview

*From August 16th to 18th, 2018, a diverse group of farmers, researchers, students, non-profit organizations, activists and Indigenous leaders gathered in Ottawa, Ontario for an Agroecology Field School and Research Summit. The event was an opportunity to learn from agroecology practitioners and explore how agroecology can be applied and expanded within the Canadian context. This report summarizes the proceedings of the event. Following the brief overview of the Summit, we highlight the various contributions that participants made, as part of the farm tours and panel discussions that took place.*

Agroecology was originally established in the early part of the 20th century as the application of ecological science to agriculture. However, in recent decades the concept has also become associated with sustainable on-farm practices as well as urban agriculture, fishing, harvesting and other forms of food provisioning. Key to agroecology are the social movements and organizations advocating for food sovereignty. In short, agroecology consists of research and actions that contribute to more ecological on-farm and food provisioning practices, with the goal of transforming the food system so that it is more sustainable and socially just.

The first two days of the summit consisted of visits to agroecological farms in the Ottawa area and in Outaouais, Quebec. Over 40 farmers, academics, activists, civil society representatives, and Indigenous leaders participated by sharing knowledge and experiences, and learning about seed saving, ecological vegetable production, rotational grazing and other livestock rearing practices. Participants also engaged in peer-to-peer knowledge sharing, a key pillar of agroecology, to discuss a wide range of topics—from the latest research on agroforestry and soil health, to the issue of land access and the politics of food systems change. Participants also shared perspectives from their work in countries around the world, including Brazil, Cuba and Nepal, with many having travelled long distances in order to take part.

The third day of the summit focused on the political dimensions of agroecology and the work of social movements. Over 150 people attended the event at the Just Food farm. Peter Rosset, a scholar who has done extensive work on food sovereignty and agroecology, spoke via videoconference from Mexico about the work of La Vía Campesina member organizations globally. His presentation was followed by a panel session that featured four dynamic Indigenous leaders who concentrated on the potential links between agroecology and Indigenous food sovereignty. A second panel discussion then addressed ways of advancing agroecology in Canada. The day concluded with a breakout session to encourage participants to share resources and skills aiming at building an agroecology movement within Canada.

This was the second such research summit to be organized by FLEdGE (Food: Locally Embedded, Globally Engaged) and its partners, and talks are already underway to organize another of these events given the incredibly positive feedback that the organizers received. For additional information, please see the appendix at the end of this document.





## Day 1 | Field Learning

### Participatory Plant Breeding and Seed Diversity

#### Greta's Organic Gardens

The first tour of the field school began at Greta's Organic Gardens, a small farm approximately 15 kilometers south of downtown Ottawa. Surrounded by lush, diversified vegetable gardens, participants introduced themselves, and Dr. Charles Levkoe, one of the event's organizers, gave an overview of the themes that would be explored over the three days. As he explained, the organizers were motivated by the questions of (1) how to define agroecology, and (2) how to expand it in the Canadian context.

**Greta Kryger** led the group on a tour and discussed her work on the farm. She has been a seed farmer for over 25 years, and while she formerly ran a market garden and a Community Supported Agriculture (CSA) program, in the year 2000 she switched over to solely producing seeds. Greta explained that her primary customers are home gardeners, and that she is constantly trying to develop seeds that are well adapted to the local growing conditions and relatively short seasons. At the same time, she is responding to the ever-changing demands of the market—growing okra, for instance, because it is very popular among local residents of Indian descent. Greta raised the fact that this work is tremendously important given that the federal government previously shut down plant breeding stations, while seed production has generally become increasingly dominated by a small handful of monolithic corporations. Greta is not only performing diverse variety trials for her own business, but is also participating in breeding projects through the Ecological Farmers Association of Ontario (EFAO) and the Bauta Family Initiative on Canadian Seed Security. Greta has also taken on a critical mentoring role for young farmers, given the demographic trends in farming and the need for keeping seed diversity alive in farmers' fields.

For more information: [www.seeds-organic.com](http://www.seeds-organic.com)

**Aabir Dey** spoke next about the work of the Bauta Family Initiative on Canadian Seed Security (implemented by USC Canada). He has taken a lead role in shaping the initiative's training, research, and policy programs, and he coordinates with representatives in other regions to engage with seed producers and farmers from all over Canada. Aabir emphasized the need that market gardeners have to access locally grown seeds that are well adapted to the particular growing conditions of an area. This is essential given that even organic seed companies in the northern U.S. are in some cases importing seeds from all over the world. The Bauta Family Initiative is therefore funding research on seed diversity led by organic and ecological farmers, and supporting activities aimed at improving varieties for commercial organic production. Aabir explained how they are working with Greta on variety trial experiments

aimed at improving various bell peppers and hot peppers.

For more information: [www.seedsecurity.ca](http://www.seedsecurity.ca)

**Dr. Pratap Shrestha** continued the conversation on seed issues by discussing his work as USC Canada's Programme Specialist, Seed Systems and Plant Genetic Resources. As he explained, he sees agroecology as starting with seed, just as "food sovereignty begins with seed sovereignty." Much of his recent work around the world has focused on Seed Security Assessments that assess whether farmers are seed secure throughout their day-to-day functioning. This methodology, developed by USC Canada, involves analyzing seed systems on the ground, as well as policies, markets and the local and national infrastructure, to understand the resilience of seed systems and the potential for farmers to be seed secure. The methodology uses a framework that takes into account seed diversity and embraces the concept of seed sovereignty. The inclusion of seed diversity makes the methodology quite relevant to the work on agroecology. As Pratap noted, in some countries it is illegal for farmers to sell seeds that they have saved, therefore context is incredibly important. He prefers to focus on 'seed sovereignty' rather than 'seed security', given the political aspects of these issues. Specific initiatives taking place in Nepal and other USC program countries are centred on Participatory Varietal Selection, where farmers have the choice of which varieties are important to them, and Participatory Plant Breeding (PPB), where efforts ensure farmers are able to grow important plant breeds in different areas around the country in question.

For more information: [www.usc-canada.org](http://www.usc-canada.org)

**"Agroecology starts with seeds"**

- Pratap Shrestha, USC Canada



**Dr. Sally Humphries**, a Professor at the University of Guelph in the Department of Sociology and Anthropology, concluded the morning's discussion by presenting how her work in Honduras uses Participatory Plant Breeding as a cornerstone of agroecology. Sally has developed a methodology wherein she works with farmer breeders, who are organized into farmer research teams, and who learn and employ scientific methods to develop plant varieties with various traits that correspond to the needs of the community. She mentioned that women's knowledge and contributions was not traditionally recognized in these kinds of initiatives, however over 50 percent of the researchers she works with are now women. Overall, by working with FIPAH

(a Honduran NGO supported by USC Canada) and institutional partners, these initiatives have increased agrobiodiversity in Honduras through the introduction of new varieties of beans and maize that are well adapted to the marginal upland conditions where some of the poorest farmers reside. Sally noted that these research efforts and activities are incredibly important in building resilience to climate change, along with unequal access to necessary resources.

For more information about Dr. Humphries' work visit [www.uoguelph.ca/socioanthro/people/sally-humphries](http://www.uoguelph.ca/socioanthro/people/sally-humphries) and the Honduras program visit [www.usc-canada.org/what-we-do/seeds-of-survival/honduras](http://www.usc-canada.org/what-we-do/seeds-of-survival/honduras)







## **Integrated Animal Vegetation Systems**

### Flat Earth Farm

The field school continued in the afternoon at Flat Earth Farm, approximately another 30 kilometers south and east of downtown Ottawa. Discussions focused on the importance of, and challenges associated with, integrated livestock-crop growing operations.

**Laurie Maus** started things off by drawing on her experiences as both a trained scientist and a farmer. She explained how her Master's degree in Biology and career in scientific research has been incredibly beneficial to the work she and her husband do in raising livestock. They are focusing on breeding and preserving heritage breeds of chickens and sheep, and Laurie discussed how integrating livestock and field production improves the health of both animals and soils/crops. Through multi-species rotational (or 'mob') grazing, she has seen the advantages of taking this approach, in contrast to the trend of separating livestock and crop production. Laurie discussed how the challenge of internal parasites can be overcome by carefully monitoring the health of sheep. Apart from checking for changes to these animals' gums and eyelids, their faeces can also be examined for parasite eggs. She brought equipment to demonstrate how parasitic eggs can be detected under a microscope, noting that her lambs are healthy and able to gain weight quickly due to these monitoring practices.

For more information: [www.hawkhillfarm.ca](http://www.hawkhillfarm.ca)

**"There are serious consequences that have come with separating animals and crops in the world of farming."**

– Laurie Maus, Hawk Hill Farm

**Dr. Phil Mount** then discussed the approach that he and his partner, Denise Bonin-Mount, are taking at Flat Earth Farm, integrating livestock with vegetable and grain production. He explained that their goal is to use agroecological methods to maximize biodiversity, which includes raising a small herd of sheep through rotational grazing, along with a mix of small livestock such as ducks and chickens. The farm also contains a mix of over 100 edible trees and bushes, and a large selection of perennial and annual crops,

as well as test plots of a number of grains, cover crops and legumes (including amaranth, sorghum, flax, chickpeas, millet, and kamut). Phil discussed the efforts they have made to seed a pasture mix that will be diverse and optimal for the sheep's health. At the same time, their understanding of agroecology extends to the community-oriented and social justice aspects associated with the concept, therefore they have been working in partnership with food banks, a local beekeeper, and the Women Warriors' Healing Garden—a non-profit organization that offers support to female veterans living with Post-Traumatic Stress Disorder (PTSD) and other forms of psychological trauma.

For more information: <http://flatearthfarm.ca>

**George Wright** of Castor River Farm provided a unique perspective as the next speaker, describing how he and his family transitioned from conventional to organic production practices. He has now been growing oats, wheat, and other crops organically for 20 years, integrating livestock into the operation to provide much-needed fertility. George raises approximately 100 pigs, several cattle, and hens and broiler chickens, with the latter being rotated through pasture on a daily basis. The livestock, he explained, not only help with fertility and productivity, but also contribute to great-tasting and nutritious crops, compared to what you will produce through conventional growing. George also discussed marketing opportunities, describing how he has been selling his grains at his local farmers' market for the last six years. He mills the grains right at the market into flour, and rolled and steel-cut oats are his most popular products. George indicated that direct marketing the processed grains provides significantly better returns than he would otherwise receive by selling through conventional markets. He closed by lamenting the lack of public extension services for organic farmers who may need advice and other support, as well as the lack of facilitation and services in Ontario through OMAFRA.

For more information: <http://castorriverfarm.ca>



The day concluded with a group knowledge-sharing circle led by Dr. Julia Laforge. Participants touched on topics that had been alluded to throughout the day, while raising other important points. These included:

- The challenge of succession planning for farmers when so few young people are seeing agriculture as a viable profession. Increasing youth involvement in farming will mean addressing cultural issues (i.e. in a society that undervalues farm work) as well as economic issues.
- Simultaneously, due to high land prices and low profit margins, there is often a need to supplement with off-farm work. This can make it more difficult to engage in the more labour-, knowledge- and time-intensive agroecological practices.
- Marketing is a challenge in a food system dominated by corporate retail, and it is not clear that farmers' markets offer a viable solution to this problem. Co-operatives and similar models

may provide some inspiration, however the group shared a sentiment that these measures are not about tinkering around the edges of the existing system, but rather building a different food system that responds to our needs and values. As La Vía Campesina has argued, it may be necessary to challenge the foundations of the capitalist political-economic system. Dr. Alain Olivier suggested that agroecology points to the need for a peaceful revolution in order to change the system.

**“Agroecology demonstrates the need for a revolution — a peaceful revolution.”**

– Alain Olivier, Université Laval







## Day 2 | Field Learning

# Agroforestry Planning and Integrated Agroecological Systems

## Beet Box Co-operative Farm

Day Two of the field school began on Beet Box Co-operative Farm, which is located on land managed by the National Capital Commission (NCC). The NCC is a federal crown corporation that manages approximately 20,000 hectares of land in the capital region. Robin Turner, who works at the NCC and also farms at Roots and Shoots Farm, provided some context. He described how the NCC has become increasingly supportive of [agricultural initiatives](#) on this land that it originally obtained in the 1950s.

**Lise-Anne Léveillé** provided a tour of the farm, which she operates with two others as a worker co-operative. They run a vegetable CSA program serving approximately 70 customers and are considering expanding their small chicken operation and getting other livestock. Lise-Anne explained that it helps that they are able to rent land from the National Capital Commission because it provides support with some farm infrastructure they need to be successful. She also discussed challenges they had faced on farm during their first growing season, including drought-like conditions at the start of the summer followed by heavy rains that flooded some of their fields. Lise-Anne joked that it seems that agroecologically-oriented farmers are expected to be superheroes, given the diverse jobs that come with running a business and growing food, while also looking after marketing the harvest to customers. Despite the challenges, she remains convinced that agroecology is a key way to change the food system, and that more young people need to be involved and supported to make this happen.

For more information: <https://beetbox.ca>  
Video interview with Lise-Anne: <https://bit.ly/2to1b1l>

**“We’re expected to be superheroes!”**

– Lise-Anne Léveillé,  
Beetbox Co-operative Farm

**Bonita Ford** then discussed her work as a Permaculture Design Trainer, pointing to the overlaps between agroecology and permaculture. She described how in permaculture the aim is to mimic nature through ecological design. Bonita described how it is possible to design landscapes to provide necessities such as food, medicine, fuel, and building materials, while also taking care of the soil, water and plants, creating habitat and supporting healthier ecosystems. She discussed the topic of edible forest gardens from

a permaculture design perspective, covering basic design principles such as a focus on native versus non-native plants, and allowing spaces to ‘re-wild’ as much as possible. Bonita indicated how permaculture often compels a different view on food altogether, encouraging seasonal eating and a valuing of plants not typically seen as food. She discussed different considerations for home, community and commercial sites, offering some strategies for how ecological design may be implemented in diverse settings.

For more information: <http://livinghearth.net>

**“We need to rethink how we eat, and what we consider to be food.”**

– Bonita Ford,  
Permaculture Design Trainer

**Dr. Alain Olivier** from Université Laval in Quebec followed this up with a presentation about his research on agroforestry. He began though by contextualizing the topic, describing how urgent it is that the global food system shift towards agroecology. Industrial agriculture is failing to feed over 800 million hungry people around the world, and is contributing to the destruction of forests, the degradation of soils, and climate change. Alain argued that agroforestry is the cornerstone of agroecology, as trees help to increase soil organic matter, prevent wind erosion, improve water quality, and provide habitat for birds and beneficial insects. He described how research is showing that, while trees can sometimes compete with crops, there is significant potential for cooperation among species depending on the tree variety used. Alain emphasized that a renewed vision of both agriculture and forestry production is required in order for sustainable agroforestry to succeed. It is therefore important to consider the social, economic, and political constraints and incentives



that influence the implementation of agroforestry systems in different contexts.

For more information: [www.chairedi.fsaa.ulaval.ca](http://www.chairedi.fsaa.ulaval.ca) | <https://giraf.fsaa.ulaval.ca>

**Dr. André E. B. de Lacerda** spoke about agroforestry research in the context of southern Brazil. André is working for Embrapa Forestry, a branch of the Ministry of Agriculture, and while many of his fellow researchers focus on conventional agriculture, his projects are geared toward traditional forest management and small-scale farming. André noted that, while large-scale monocultures have become dominant across Brazil's agricultural landscape, family (peasant) farms are actually responsible for 70 percent of the

food production. His research projects have been geared toward encouraging traditional forest management practices in the Araucaria Forest, a biodiversity hotspot where erva-mate (or 'yerba mate') grows. This is a tree that is important for its leaves, which are used to make the beverage by the same name that is popular through South America and beyond. André discussed the need to share silviculture techniques, as it is not easy to effectively prune and care for the erva-mate trees. His research is demonstrating how effective forestry management principles can lead to both healthy ecosystems and stable profits for producers.

For more information: <https://www.embrapa.br/en/florestas>







## **Holistic Management, Rotational Grazing, and Soil Health**

### Grazing Days Farm

For the afternoon portion of the field school, participants reconvened at Grazing Days Farm, which is in Saint-André-Avellin, Quebec, approximately 80 kilometers east and north of Ottawa. This is one of several farms that have been established in Quebec by farmers who moved their operations from Ontario. Relatively more affordable land prices are likely a key factor in these farmers' decision to relocate.



**Paul Slomp** showed the group around his pastures, under a light rain that made the green of the grasses particularly vibrant. Paul and his family are raising their approximately 180 cattle and 70 pigs on the 285-acre farm using intensive rotational grazing techniques. Rotational grazing is part of Holistic Management practices, which are geared toward fostering agro-ecosystem health and increased biodiversity. Paul demonstrated that in areas where cattle had been grazing the soils were rich and the grasses diverse, despite the fact that the land had previously been farmed conventionally as a monoculture. Rotational grazing, Paul argued, can reverse industrial agricultural practices by encouraging a healthy soil ecosystem full of microbial communities and mycorrhizal fungi that contribute to carbon sequestration. While Paul and his partner, Josée, sell to approximately 500 customers in the Ottawa-Gatineau area, they are also concerned about the social aspects of who can afford their meat. They have therefore established an 'affordability fund,' which asks customers who can afford to, pay a slightly higher price for each pound of meat, so that lower-income households can access the same products 'at cost'.

For more information: <https://grazingdays.ca>

**"We're turning dead soils into living soils. This is how carbon sequestration happens."**

– Paul Slomp, Grazing Days Farm

**Dr. Liette Vasseur** then spoke about the research projects she is coordinating as a professor at Brock University. Her research, which takes place in both China and Ontario, is motivated by growing concerns about environmental degradation and the health risks caused by chemical contamination in soil and crops, and farmers' interest in reducing the use of chemicals in their operations. Liette

spoke about experiments her research group is doing to measure the biology and chemistry of soils under controlled conditions, including where certain agromineral amendments are applied. Working with various partners, including Boreal Agrominerals, they are assessing the potential of Spanish River Carbonatite (SRC) to improve soil health. Liette explained that her lab is interested in soil microbial, nutrient and invertebrate responses to different amendment combinations, as well as vegetation (crop, cover crop, and weed) responses. Her presentation sparked an interesting conversation about the extent to which agroecology should encompass non-chemical inputs that are still external to a farm's ecosystem.

For more information: <https://brocku.ca/mathematics-science/biology/directory/liette-vasseur>

**Dr. Francisco Paulo Chaimsohn** continued the conversation by speaking about his research projects from southern Brazil. He focuses on corn and bean cultivation on poor soils and scale-appropriate technologies for family farms. Paulo is developing projects on non-timber forest species and agroforestry systems, including palm trees for the production of palmito (heart of palm) and açai, and yerba mate. His research group is investigating how effectively managed agroforestry systems can offer alternative income for family farmers, while conserving biodiversity in the Araucaria and Atlantic Forests. Paulo discussed how agroforestry systems that have been effectively managed communally by family farmers for generations are under threat. On top of increased pressure for farmers to deforest their lands and convert to monocultural cropping systems, there is the added challenge of succession as many young people are leaving agriculture. Paulo's group is taking a participatory approach to identify, quantify, and capture criteria that can be used by both small-scale farmers and researchers to better understand and improve traditional agroecological and agroforestry systems.

For more information: [www.escavador.com/sobre/3826035/francisco-paulo-chaimsohn](http://www.escavador.com/sobre/3826035/francisco-paulo-chaimsohn)

**Dr. Angel Leyva Galán** then spoke about the research he is doing at Cuba's National Institute for Agricultural Sciences (INCA). He discussed his work on weed management techniques, which is motivated by the challenges that farmers face as they rely on labour-intensive methods of dealing with weeds as alternatives to the use of chemical herbicides, while at the same time facing labour shortages. Angel suggested that this is an important area of development for agroecology, as the very language that is used ("weeds") tends to trigger a negative connotation, whereas not all "plants that grow with crops" are necessarily bad. Many of them hold social and cultural value, and also help increase microorganism populations that are very helpful to the agroecosystem. His research has demonstrated the benefits, for example, of applying sunflower biomass between rows of corn (maize) due to the plant's allelopathic effects, which inhibit weed growth.

As someone who has been working as an agroecologist for over 25 years, Angel also took time to reflect on the broader state of affairs. He argued that food sovereignty and agroecology have unfortunately not advanced sufficiently, as demonstrated by problems such as climate change and biodiversity loss that have only increased. Agroecology depends largely on government action, however many governments

are clearly beholden to industrial agribusiness, and are not embracing policies that favour agroecological development. It is evident that there is a need for small-scale farmers to be better educated in agronomic and related sciences, just as agricultural 'experts' also need to better understand agroecology. It is also important for agroecology enthusiasts to not just talk amongst themselves, Angel argued, as those farmers engaging in high-input agriculture also need to be brought into the conversation. Their lack of engagement is another sign that the agroecology movement still needs strengthening.

For more information:

<http://ediciones.inca.edu.cu>

**"We need to invite the people doing high-input agriculture into these conversations."**

– Angel Leyva Galán,  
Cuba's National Institute for  
Agricultural Sciences







## Day 3 | Perspectives and Planning

### Just Food Farm

Day Three of the field school took place at the Just Food Farm. Just Food is a non-profit organization based in eastern Ottawa that has a stated mission “to work towards vibrant, just and sustainable food and farming systems” in the region. Approximately 150 people gathered at the farm for the final day of the event, and during a break in the programming participants were able to visit the diverse projects underway on the farm and speak with growers in person.

For more information: <http://justfood.ca>



## Agroecology and La Vía Campesina

**Dr. Peter Rosset** delivered the first formal presentation of the day, speaking to participants via videoconference from Chiapas, Mexico. Peter is a professor of agroecology at El Colegio de la Frontera Sur (ECOSUR) in Chiapas, the co-coordinator of the Land Research Action Network, and a member of the staff team of La Vía Campesina. He began by providing some background about La Vía Campesina, the international movement of peasants and small-scale farmers that was formed in 1993 and now has member organizations in over 80 countries. Peter stressed that agroecology is a key pillar of food sovereignty, the concept that demands that we look beyond 'food security' to ask who is producing food, and how and where it is being produced.

Agroecology is a science that is based on the knowledge and practices of peasant farmers that have been accumulated for thousands of years. It is not about recipes, but rather principles that are applied according to the unique reality of a given locale. These principles are built with nature as a model that peasants and farmers strive to emulate by coexisting with natural ecosystem processes. However, Peter added, agroecology is also about social organization and a social process. Although the Food and Agriculture Organization of the United Nations (FAO) has taken an interest in agroecology, it is important that the term not be co-opted and interpreted as an input-substitution approach to relatively sustainable monocultures supported by green-washed agribusiness. Rather, the social organization of a peasant-driven agroecology requires the multiplication of small farms over increasingly large territories. This is how agroecology will scale 'up' and 'out', and it is a matter for social movements like La Vía Campesina to take up, along with allied peasant and farmer organizations.

Peter then provided a number of illustrated examples of how agroecology is being pursued in different countries around the world, from

Korea to India to Ghana to Venezuela. He also acknowledged the work of Union Paysanne in Quebec and their role in establishing the Centre Paysan, Canada's only agroecology school recognized by La Vía Campesina. Through the various examples he provided, Peter made it clear that agroecology is not only about on-farm practices, but also economic models that support the livelihoods of peasants and small farmers, including agrarian reform and access to land. Agroecology is about both horizontal knowledge-sharing and seed sovereignty and it is about the kinds of social transformation that will bring about a more just and sustainable food system.

For more information:

<https://viacampesina.org/en> &  
<https://fernwoodpublishing.ca/book/agroecology>



**"Agroecology is a key pillar in the construction of food sovereignty."**

– Peter Rosset,  
El Colegio de la Frontera Sur



## Capacity-building within Agroecology: Indigenous Perspectives



*The learning experience continued with a panel discussion on Indigenous perspectives on agroecology and food sovereignty.*

**Byron Beardy** and **Raquel Koenig** spoke about their work at the Four Arrows Regional Health Authority, which is based in Winnipeg, Manitoba. Raquel is a member of Wikwemikong First Nation in Ontario, and a graduate of the University of Manitoba. She brings to her work at Four Arrows considerable experience in working with Indigenous and Northern communities on their local food initiatives. Byron and Raquel contextualized the food security projects and research that they do by emphasizing the interconnections between food, language and identity. In their work at Four Arrows, they see there as being six key interrelated pillars to food: Spirit & Celebration, Language, Women [& Water], Youth, Elders, and Land (Mother Earth). As he grew up in Wasagamack First Nation in northeastern Manitoba, Byron had the privilege of eating everything edible from the land—an experience that he continues to enjoy today.

To think about food, Byron stressed, you need to know who you are and where you come from. The word strawberry in his language, “Otehimin,” is translated as “heart berry”, and when you see a strawberry plant’s runners extending like veins over Mother Earth, that is an exact representation of what food sovereignty means to him: the ability to understand and to communicate with Mother Earth. Speaking to their work at Four

Arrows, Byron explained that Indigenous peoples were historically subjected to settlers’ forcing of their “good ways” onto them. This feeling of superiority that settlers seem to have continues to be evident today in the way that many within government and NGOs consider themselves to be experts when it comes to defining food insecurity and prescribing solutions for Indigenous peoples. Byron continued by stressing that food is a way of life, and it is relational. He reflected on the farmers’ knowledge that had been shared over the preceding two days, noting that these are practices and ways of knowing to which we need to return.

For more information: [www.fourarrowsrha.ca](http://www.fourarrowsrha.ca)  
Video interview with Byron: <https://bit.ly/2BFsjgS>

**“Food Sovereignty is to understand and communicate with Mother Earth.”**

– Byron Beardy, Four Arrows Regional Health Authority

**Johl Whiteduck Ringuette** then shared some of his experiences as the chef and proprietor of NishDish, a business built on traditional Anishinaabe food, and as the founder of the Ojibiikaan Indigenous Cultural Network, a non-profit focused on Indigenous Food Sovereignty. Johl discussed how he not only focuses on Indigenous recipes, but also goes out of his way to procure ingredients from Indigenous growers and harvesters. For example, for recipes inspired by growing of the “three sisters” (corn, beans and squash), he travels to Six Nations to purchase white corn. Johl echoed the important connections between language and food, stressing that it is essential for him to be able to identify plants in Ojibwe, an ongoing learning process. Plants speak to us, he argued, and we need to learn how to listen. Johl provided the example of wild rice, a food that is central to the history and identity of the Anishinaabe people. In the context of contemporary struggles over the harvesting of wild rice in lakes populated by settler cottages, it is important to recognize the significant fact that rice knows how to re-plant itself.

For more information: [www.nishdish.com](http://www.nishdish.com)

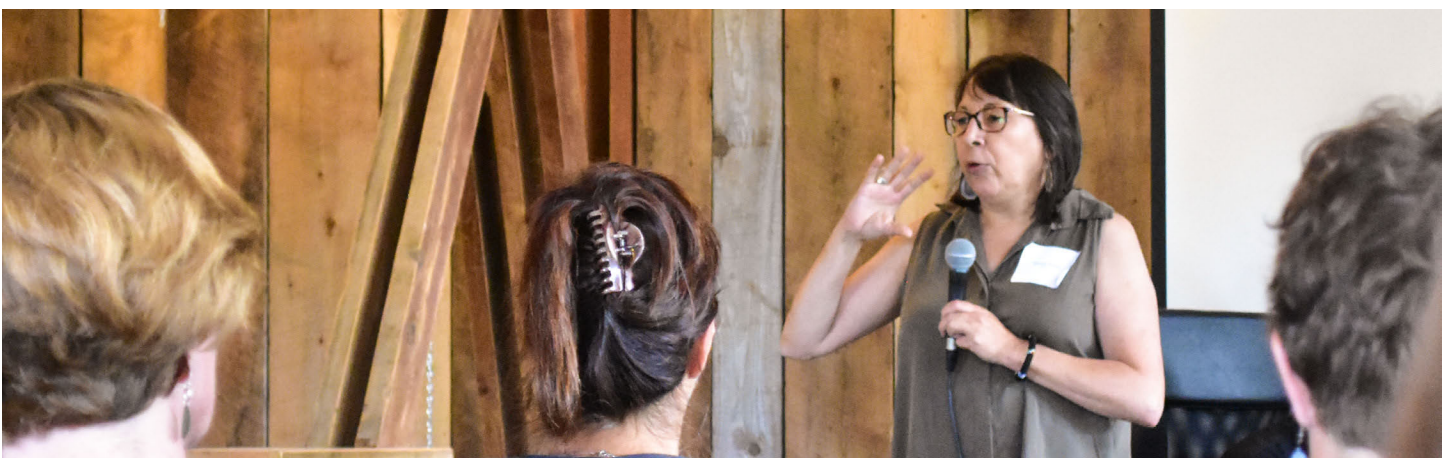
**Dr. Sherry Pictou** then discussed her understandings of Indigenous food sovereignty as a professor at Mount Saint Vincent University, and a Mi'kmaw woman from Bear River First Nation, Nova Scotia. Her experiences have led her to focus on the importance of fisheries as they pertain to Indigenous livelihoods and food sovereignty. Sherry has done work with La Vía Campesina at the international level,

advocating for the United Nations to recognize the importance of fisheries in relation to Indigenous rights and livelihoods. This focus expands the concept of food sovereignty in some ways, but there are complementarities between agroecology and Indigenous ways of knowing, that are also central to small-scale fisheries. Sherry also spoke about the resurgence of Indigenous lifeways and foodways that is taking place, increasingly countering the discourses of corporations and governments that take a colonial approach by trying to push solutions onto people. She emphasized that it is important to recognize the multiple forms of oppression that different people experience. For example, women have a particularly important role in advancing an Indigenous agroecology, but face many challenges. Sherry indicated that she is hopeful about the growing agroecology movement in Canada.

For more information: <https://bit.ly/2Nd74aC>  
We Story the Land documentary: <https://bit.ly/2lgsGUH>

**“I was shocked to find out that there is an agroecology movement in Canada.”**

– Sherry Pictou,  
Mount Saint Vincent University





## Moving Agroecology Forward



*The sessions continued with a lively panel discussion that was moderated by Dr. Charles Levkoe. There was a rich series of exchanges between the panelists, and below is a summary of some of the key points that each speaker raised.*

**Ayla Fenton** spoke about her experiences as a new farmer and an organizer with the National Farmers Union (NFU). She started out by stressing that agroecology is a radical proposal, a struggle against patriarchal capitalism. This is important, Ayla argued, because if our analysis is wrong, then our actions are going to be wrong. There are challenges that come with organizing within North America's individualistic culture, but it is important to appreciate how powerful social movements can be through collective action. Collective action will involve having challenging conversations about topics such as colonialism and racism in the food system, and it will involve changing the fact that white bodies are often not 'on the line' in moving the struggle forward. Ayla also emphasized that it is important to avoid 'preaching to the choir' about agroecology; conversations need to include conventional farmers who are also being disadvantaged through the corporate food system. The pillars of agroecology will resonate with these farmers, including farmer autonomy and the ability to be stewards of the land while also making a living. At the same time, there is a need for awareness about the risk of corporate co-optation, and about industry associations that are trying to win public trust with their conversations about 'social license' and campaigns such as 'Agriculture more

than ever'. Ayla concluded by suggesting that agroecological on-farm and economic projects need to be replicated so that the policy-makers will get on board. "Governments don't lead change; they follow it," she stated.

For more information: [www.nfu.ca](http://www.nfu.ca)

**Dr. André E. B. de Lacerda** spoke about the similarity of the struggles taking place in different contexts around the world. He mentioned, for example, the frustrations that farmers have about producing good quality food while also having to struggle to get by, which is particularly problematic when there is a lack of markets for their products. The context for this is the fact that

**"The struggle for agroecology is a struggle against patriarchal capitalism."**

– Ayla Fenton,  
National Farmers Union

most research money tends to be concentrated toward big business. These systemic challenges will be difficult to overcome, André noted, and agroecology enthusiasts may become frustrated if they feel they cannot make substantial change without changing 'the world'. He spoke about how his research group has witnessed that it is possible to shift policy gradually through cooperation and coordination, although this can be difficult. There is a need for allies who will help in pushing agroecology forward, André argued, and for this reason one needs to be careful about how they present agroecology. For example, in Brazil, some people believe that agroecology is mystical in nature, which will repel scientists and others who are scientifically minded. Similarly, education is important, but it is important not to be patronizing in discussing these issues.

**Dr. Sherry Pictou** stressed that it is important to recognize the political moment that is upon us. Things need to change. Resource extraction continues to be a model for economic development in Canada and beyond, while there is the threat that useful concepts like agroecology may be co-opted. She discussed how 'blue-' or 'green-washing' (i.e. spin that promotes activities or actors as environmentally friendly when this is not necessarily the case), is an example of what happens when language and ideas are appropriated and adopted to the neoliberal model. Similarly, a related risk is 'NGO-ization,' or the tendency of organizations to depoliticize social movement narratives and practices. In terms of Sherry's own research area, she stressed the importance of ensuring that fish and other Indigenous sources of food are protected (e.g. from environmental contamination), and that these struggles are recognized in terms of their importance. Some of this can even be difficult to advance within non-profit organizations that focus on food security in Canada. Nevertheless, just as there are crises that are converging, there is also a chance that we will see a convergence of movements, she added. Sherry indicated that she is hopeful that such a convergence may be possible within Canada, but there is a need for more opportunities such as this field school, which has brought people together to participate in important conversations.

**Faris Ahmed** spoke from his perspective as the Policy and Campaigns Director for USC Canada. He acknowledged that NGOs have a critical role in supporting social movements, and bringing grassroots solutions and farmers' voices to bear on policy. The technology-centric, 'feed-the-world' narratives that accompany corporate agribusiness-type solutions need to be countered, Faris argued. It is important to also note that there is a door that has been opened at the level of the United Nations, with the FAO and the Committee for World Food Security (CFS) taking up programs of research in agroecology in recent years. There is a chance for genuine solutions to be pushed forward within these forums, including within the CFS; but we need to be vigilant against co-optation. Faris noted that within Canada, agroecology has 'landed' but it looks like a spaceship to people, therefore much more needs to be done to help us engage with the concept. A recent poll regarding Canadians' perceptions about food indicated that consumers generally care about farmers, however it seems that a complicated concept like agroecology will only garner support as a result of a lot of hard work. The public tends to be motivated by negative messaging, Faris argued, such as fear-based narratives about climate change or GMOs. However, it is important to stay positive when discussing these issues and to promote agroecology as a solution to a variety of problems.

For more information: [www.usc-canada.org](http://www.usc-canada.org)

**Geneviève Lalumière** spoke about her work as a seed saver and craftswoman, as a member of Union Paysanne and the Vice-President of the Centre Paysan. She noted that in Quebec they are struggling just to have their voices heard

**"Agroecology has landed but it looks like a spaceship!"**

– Faris Ahmed,  
USC Canada



as small-scale farmers and peasants (paysans/ paysannes). Part of the issue is that there is a 'syndicate monopoly' in the province, which means that all farmers need to pay subscription fees to UPA (l'Union des producteurs agricoles), the mainstream agricultural organization, because this is mandated by government. Union Paysanne, a member organization of La Vía Campesina, on the other hand, is not recognized or supported. Geneviève stressed that there is a need for allies within the movement for agroecology, but that it is the peasants and Indigenous people who must lead the way. This will help avoid problems like NGO-ization and others claiming leadership or defining what is at stake. Within North America, the NFU and Union Paysanne are leading the process for advancing agroecology, she argued, noting that the Centre Paysan is the only La-Vía-Campesina-recognized agroecology school in Canada. Within the Centre Paysan, they are

following a specific agroecology methodology of peer-to-peer learning through a series of workshops that take place via a network of partner farms. The ultimate goal, Geneviève stated, is to have peasant farms multiply regenerative practices and progressively take the place of industrial farming. In order for change to happen, she argued, we will need to talk about capitalism and imperialism, to be anti-capitalist. This is because agroecology is not compatible with the existing economic system, nor with the neoliberal governmental policy focus on the exportation of agricultural products and the treatment of food as a commodity. It will be necessary, Geneviève said, for peasants and their allies to lead the way, and to engage in civil disobedience when necessary.

For more information: <https://unionpaysanne.com> | [www.centrepaysan.ca](http://www.centrepaysan.ca)



# Summary and Next Steps

As the title of this reports suggests, one of the goals of this event was to contribute to an agroecological movement in Canada. As such, creating opportunities to let participants get to know each other, discuss ideas, learn from each other, and share skills and resources was a priority when designing the event. As such, we concluded the third day with breakout sessions where participants could build connections and think about the next steps. In particular, participants reflected on who the allies and opponents are to the development of agroecology, as well as the opportunities for next steps.

Building on the presentations before, most groups discussed challenges facing agroecology from a capitalist and colonial system and worldview with specific opponents including corporations, mainstream media, and some elected officials. An overall threat that resonated with many was with the co-optation of the term agroecology and its misuse by corporations and others.

Meanwhile, opportunities to build relationships with allies included reaching out to Indigenous communities, climate activists, feminists, local food organizations, youth, academics and researchers, local businesses, community gardens, community health centres, teachers, fair trade organizations, co-operatives, and credit unions. Many discussed the importance of building relationships, ensuring that the movement is open and welcoming, and working together to get past our differences.

Discussion also included how to build a movement in partnership with these potential allies. Many groups highlighted the opportunity presented by the discussions surrounding a national food policy in Canada; regardless of government action on this file, there are opportunities to build relationships with others who are being consulted or are thinking about the issues involved in such a policy. Other strategies included building relationships with schools, peer-to-peer learning opportunities, and the sharing of agroecology between farmers and others; promoting online and in-person forums for discussion; research partnerships; and continuing to build alliances and coalitions. Many encouraged us all to get our hands dirty with agroecology, by both working in the field and talking to people within our communities.

In an effort to continue to build on this momentum, we released a series of videos from the event that showcase different perspectives on agroecology in Canada [<https://bit.ly/2Gsr7RX>]. We have also launched a Facebook group: Agroecology in Canada [<https://www.facebook.com/groups/749707485424930/>]. We hope that this will help build a national community of supporters of agroecology and provide an opportunity to continue the conversations we started in August 2018. Please share with your friends, families, colleagues, communities, and networks.



# Appendix

## For additional information on the 2018 Agroecology Field School and Research Summit:

- Watch videos that highlight the proceedings of the field school and research summit, including an overview video and interviews with participants Byron Beardy and Lise-Anne Léveillé: <https://www.youtube.com/playlist?list=PLdtZB0Q09A3Dnxt7NFHoK4TbySxrUS45K>
- Read The Future of Food is Ready for Harvest, by Charles Levkoe and Faris Ahmed, in The Conversation: <https://theconversation.com/the-future-of-food-is-ready-for-harvest-103050>
- See the blog summarizing the proceedings of the event, Agroecology field school sparks important conversations, by Bryan Dale: <https://fledgerresearch.ca/2019/01/21/agroecology-field-school-sparks-important-conversations>
- Contact Charles Levkoe, Lakehead University, [clevkoe@lakeheadu.ca](mailto:clevkoe@lakeheadu.ca) or Bryan Dale, University of Toronto, [bryan.dale@mail.utoronto.ca](mailto:bryan.dale@mail.utoronto.ca).

## Suggested readings:

Isaac, M.E., R. Isakson, B. Dale, C.Z. Levkoe, S. Hargreaves, V.E. Méndez, H. Wittman, C. Hammelman, J. Langill, A. Martin, E. Nelson, M. Ekers, K. Borden, S. Gagliardi, S. Buchanan, S. Archibald, A. Gálvez Ciani (2018). Agroecology in Canada: Towards an Integration of Agroecological Practice, Movement, and Science. *Sustainability*, 10,3299: 1-17. DOI: 10.3390/su10093299

Laforge, Julia M. L., and Charles Z. Levkoe. 2018. "Seeding Agroecology through New Farmer Training in Canada: Knowledge, Practice, and Relational Identities." *Local Environment*, 23(10): 991-1007. doi:10.1080/13549839.2018.1515901.

Laforge, Julia M.L., Ayla Fenton, Virginie Lavallée-Picard, and Stéphane M. McLachlan. 2018. "New Farmers and a National Food Policy in Canada." *Canadian Food Studies*, 5(3): 128–152. doi:10.15353/cfs-rcea.v5i3.288.

## List of participants:

Mark Aaftink, Peace and Environment Resource Centre / Further Reflections Podcast  
Faris Ahmed, USC Canada  
Sue Aitken, Carleton University  
Sundaura Alford-Purvis, Canadian Society for Organic Urban Land Care  
Sarah Anderson  
Peter Andree, Carleton University  
Patricia Ballamingie, Carleton University  
Peter Baril  
Diane Beckett  
Marie Bencze  
Peter Blanchard, FoodWork.ca

Eric Bollman  
Denise Bonin-Mount, Flat Earth Farm  
Samantha Boucher  
Vanessa Bravo  
Patrick Bustin  
Joanne Butler  
Adam Caldwell, Carleton University  
Francisco Paulo Chaimsohn, IAPAR/ EMATER-PR  
Monica Chappell, Just Food  
Eric Chaurette, Inter Pares  
Joana Chelo  
Rachel Cheng, Food Secure Canada  
Rachel Cheng  
Ian Clark, Bridgehead  
Kath Clark, USC Canada  
Adeline Cohen, Eco-ethnomics  
William Coney, Dalhousie University  
Nathaly Couture  
Matthew Cyr  
Bryan Dale, University of Toronto  
Jeff de Jong, USC Canada  
Naomi de Ville  
Stefanie DeFilippi  
Aabir Dey, USC Canada - The Bauta Family Initiative on Canadian Seed Security  
Véronique Dubé  
Margaret Duthie  
Jaycey Ewald  
Ayla Fenton, National Farmers Union  
Karina Flores, The Sassy Tomato  
Bonita Ford, LivinghEARTH  
Sarah Fox  
Angel Leyva Galán, INCA (National Institute for Agricultural Sciences) - Cuba  
Moe Garahan, Just Food  
Jay Garlough, Hidden Harvest Ottawa  
Brent Gervais  
Terran Giacomini  
Genevieve Grossenbacher, USC Canada  
Jill Guerra, Canada Organic Trade Association  
Janette Haase, Wolfe Island Community Garden Group School to Garden program  
Cherry Halcovitch, Roots to Harvest  
Stephen C Harris, Solidarité Haïti  
Joyce Hostyn, Master Gardener and Lakeside Community Garden Board Member  
Sally Humphries, University of Guelph  
Farah Ibrahim  
Karine Jarzecki, University of Guelph  
Angie Jodoin  
Ryan Katz-Rosene, University of Ottawa  
Arlene Keith  
Christopher Kelly-Bisson, University of Ottawa  
Roseann (Rosie) Kerr, Queen's University



Don Kerr  
Amrit Khosla, Just Food  
Irena Knezevic  
Jodi Koberinski, University of Waterloo  
Raquel Koenig, Four Arrows Regional Health Authority  
Greta Kryger, Greta's Organic gardens  
Andre Lacerda, Embrapa  
Sébastien Lacombe, Fondation pour le foncier solidaire  
Julia Laforge, Lakehead University and USC Canada  
Geneviève Lalumière, Union paysanne - Centre paysan  
Jack and Mireille LaPointe, National Farmers Union and Ardoch Algonquin First Nation  
Rossen Lee, Ryerson University  
Lise-Anne Léveillé, BeetBox Co-operative Farm  
Marie-Eve Levert, USC Canada/The Bauta Family Initiative on Canadian Seed Security  
Charles Levkoe, Lakehead University  
Bo Li, Chi Garden  
Carly Livingstone, Canadian Organic Growers and Carleton University  
Darlène Lozis, 3R International  
Colin Lundy, Strathmere Farms  
Katherine MacGregor  
Neil Macmillan, Canadian Farm Writers Federation / AAFA - The Ag Communicators Network  
Brittany Manley, Against the Grain Farms  
Inès Marchese, National Farmers Union  
Laurie Maus, Hawk Hill Farm  
Maureen McEown  
Brian McLaren, Lakehead University  
Meryl McMaster  
Scott Mitchell, Carleton University  
Al Morrison  
Phil Mount, Flat Earth Farm  
Sarah Mulvihill, Canadian Organic Growers  
Anne Munier  
Astrid Muschalla, Oasis Institute for Healthy Living and Canadian Society of Organic Urban Land Care  
Erin Nelson, University of Guelph  
Stuart Oke, National Farmers Union  
Beatriz Oliver, USC Canada  
Alain Olivier, Université Laval  
Saambavi Paskaran, Carleton University  
Sherry Pictou, Mount Saint Vincent University  
Chloé Poitevin-DesRivières, Carleton University  
Hailey Ren  
Erin Richan  
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Luke Struckman, Carleton University  
Shan Sun, Chi Garden  
Gord Tennant  
Nikki Tesar, Farmer  
Fionna Tough, Farm Tough  
Hywel Tuscano, NishDish Catering and Marketeria and Ojibiikaan Indigenous Cultural Network  
Daniel Van Vliet, Van Vliet Horticulture  
Liette Vasseur, Brock University  
Marie Voutsinos  
Katie Ward, National Farmers Union  
David Welch  
Johl Whiteduck Ringuette, NishDish Catering and Marketeria and Ojibiikaan Indigenous Cultural Network  
Amanda Wilson, St Paul University  
Lisa Wong, University of Guelph  
George Wright, Castor River Farm  
Ceira Young  
Melanie Younger, For The Wild Collective



# AGROECOLOGY

## FIELD SCHOOL & RESEARCH SUMMIT



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Visit <https://fledgeresearch.ca/agroecologyfieldschool2018/> for details and to register.



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