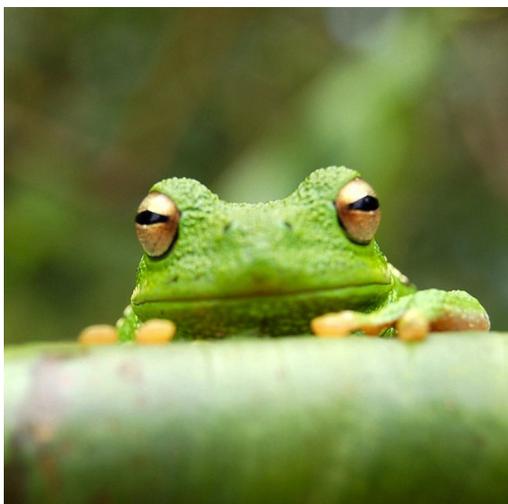




Debut Newsletter



Incorporated and Bylaws approved

Registered since December 2013, Grey Bruce Centre for Agroecology Co-operative Inc. is incorporated as a not-for-profit co-operative with an open and voluntary membership. In January 2015, we have also adapted our bylaws at our first annual meeting! We tried to keep it as simple as possible.

In this inaugural edition of our newsletter, we are highlighting some of our event highlights and progress of on-going projects. Want to learn more or get involved? Don't hesitate to contact us about suitable projects, as non-members work with us on a project before deciding to join.

About us

by KRISTINE HAMMEL

The Grey Bruce Centre for Agroecology is a group of farmer researchers working on policies and on-farm production research to benefit ecological farmers. Our members have academic degrees and professional experience, but we are farmers first! Our members rely on farming as a significant share of our annual income. With our combination of practice and theory, we see ourselves as a bridge between policy, research and practice. As a group, we have a wide range of knowledge, experience and skill sets that make us uniquely suited to understanding the strengths, needs and challenges of diversified farms. Our goal is to further the success of such farmers through our work with the public sector (policies, best practices, systems analysis) and all participants in the food system (production, distribution, advocacy, education).

Projects

In 2014, we finalized the Fresh City project and engaged in three new projects. Download our documents at <http://www.gbcae.com/publications.html>

Building C.R.A.F.T. International

by THORSTEN ARNOLD

As a member of the Collaborative Regional Alliance for Farmer Training (C.R.A.F.T.) in Southwest Ontario, Thorsten Arnold participated in the first international meetings of North American CRAFT groups, which was hosted at Hawthorn Valley Farm in New York State (Jan 2014) and in Ashville, NC (Feb 2015). Thorsten carried out interviews with over 20 CRAFT group coordinators and submitted a first study that described the diversity of CRAFT groups, highlighting successes and challenges. A second study is underway that extracts best practices and lessons from these interviews.



What is Agroecology?

Agroecology applies ecological principles – nutrient cycling, population regulation, energy flows and a dynamic equilibrium – to farming systems, in order to make the best use of nature's productive ability without damaging these resources. As a practice, agroecology explores ecological principles for soil fertility and pest management. As a science, agroecology takes a whole-systems perspective to food, feed, and fiber production that balances environmental soundness, social equity, and economic viability among all sectors of the public, including international and intergenerational peoples. As a movement of farmers, agroecology connects farmers with farmers for learning and knowledge exchange, farmers and consumers for a new alliance of food.

Monitoring native pollinators

by JERI PARRENT

The alarming decline in honeybee populations worldwide has led to increased appreciation for the role that pollinating insects play in putting food on our table. However, little attention has been given to the many native pollinator species that often do the lion's share of the pollination services for many of our crops. With help from the TD friends of the environment grant awarded to GBCE in 2014, Jeri and Thorsten began a pilot project to develop education materials and protocols that would help engage citizen scientists and students to undertake native pollinator monitoring projects. Project protocols were developed for monitoring native pollinators in Grey-Bruce, several workshops were given to interested farmers, students and citizen scientists, and a demonstration pollinator garden was erected at St. Basil's school in Owen Sound. Native pollinators serve as key indicator species for environmental health, thus understanding their diversity and abundance provides valuable information about ecosystem quality (see our protocols for monitoring squash bees at <http://gbcae.com/pollinators.html>).



Knowledge needs of ecological farmers

by THORSTEN ARNOLD

Together with the Ecological Farmers of Ontario (EFAO), we have conducted a survey on knowledge needs of the sector. Farm internships – which continue to exist in a legally unclear space – were clearly identified as the best place of learning. Results will be published soon.

Species at Risk

by FREEMAN BOYD

With a ballooning Species at Risk (SAR) list and a commitment from both the federal and provincial governments, work to support the recovery of SAR in Ontario is ramping up. Grey and Bruce Counties will be on the front line of this effort because species that depend on grasslands are in sharp decline and our agriculture supports significant areas of grassland habitat. Freeman is working as the lead consultant in the development of the first "biodiversity enhancement plan" for a pasture operation funded under SARFIP (Species at Risk Farm Incentive Program). This will be an ongoing project as there is much to learn. See our website for a first report on Best Management Practices.

Reports on some 2014 workshops

Agroecological Pest Management

by LAURIE THOMPSON

In September 2014, a group of farmers gathered for a day-long workshop led by Dr. Fulvio Gioanetto, a promoter of knowledge-based, self-reliant methods that give farmers extensive independence from the input industry.

Workshop participants learned how naturally occurring plants on the farm can be used as bio-indicators of



soil fertility and soil health, how to attract more beneficials, as well as how weeds and native plants can be used to make organic pesticides and grow healthier crops.

Participants also had ample opportunity to discuss pest issues specific to their own farms, and by the end of the day, there was great enthusiasm amongst the group to try these newly acquired agroecological and economic approaches!

Rejuvenating ageing apple orchards

by THORSTEN ARNOLD

In two orchards, we have offered workshops on pruning a senescent apple orchard. Chris Graul, a master orchardist from Germany, explained to participants the balance of vegetative and regenerative growth, and how to induce rejuvenation with fairly hard cuts. Depending on the growth vigour of the tree variety, a multi-year strategy is required, that not only triggers new growth, but also channels this growth into a desired tree form.

Agroecology panel at Latornell

by KRISTINE HAMMEL

The Latornell Conservation Symposium (Alliston) is one of Ontario's premier annual environmental events. The Symposium provides a forum for practitioners, policy makers, non-government organizations, academics and businesses to network and discuss the challenges and opportunities in Ontario's conservation field.

This past November, Kristine Hammel and Thorsten Arnold were part of the panel "Agroecology – An ecosystem approach to farm production" along with Dr. Jeri Parrent and Alvaro Venturelli. Thorsten introduced the agroecological concept by presenting North American farming systems that make use of its principles. Jerri spoke about conventional and agroecological approaches to soil management and the implications for individual farms and the broader landscape. Alvaro spoke of his experience operating Plan B Organic Farm, a diversified vegetable operation with direct marketing, in Flamborough, using an agroecological approach. For her presentation, Kristine spoke about food systems that encourage (or discourage) agroecological approaches to farming. The key concept was that the broader food system (how food gets from the farm to the eater) plays a very important role in shaping on-farm production practices.

Goals and barriers of the agroecological movement

The agroecological movement shares the belief that farmers can feed the world while substituting the vast majority of harmful agricultural inputs with knowledge, design, and products derived from their surrounding ecosystem – microbes, plant extracts, and pathogens against pests. This comes at a time when most governments have withdrawn from educating farmers and farmer-centered research, and instead are committed to public private partnerships with large input corporations, which have gained control over global resources only rivalled historically by the Rockefellers and the Fuggers. In this context, the agroecology movement was born out of necessity in India and Latin America, but practices quickly gain foothold around the world – and some techniques are even applied to protect the large monocultures in a way that is cheaper and less harmful.

The session was scheduled parallel to several others related to agriculture and at first we were a bit apprehensive about how we would be received. But we captured our audience and everyone stayed past the official end of the session to continue the conversation! We felt that a conversation with Conservation Authorities about the role that ecological farming can play for nature conservation has only begun.

Hire us to deliver food-related workshops for you!

by BRENDA HSUEH

Take advantage of the wide knowledge base of the team at GBCE! Our members and associates can lead workshops on a variety of topics to do with Food Systems and Agroecology; Farm Management; Market and Home Gardening; Ecology, the environment and food; and Food Preparation. You can see a detailed list at: <http://www.gbcae.com/workshops.html> (Download full list)

If the topic you're interested in is not listed, ask us at info@gbcae.com or via telephone!



Interesting TidBits

Organic Agriculture 3.0

by THORSTEN ARNOLD

European organic agriculture (OA) is facing a supply crisis, because supply falls far behind the continued growth of consumer demand. The resulting reliance on international trade to meet this demand in German-speaking countries has led to a credibility crisis, and alternative (but less transparent) sustainability standards, like "regional" conventional food, are undermining the organic sector. The leading organic farmer associations and the Research Institute of Organic Agriculture (FiBL) have come together and formulated a think piece on the future of organic agriculture, and present four future scenarios: (1) *Organic 2.1* maintains the status quo with minor improvements. This scenario fails to grow out of its niche relevance, and alternative standards grow in importance; (2) *Quality & values* focuses on exigent consumer demands and raises conversion requirements. This scenario builds the credibility of organic agriculture and continues slow growth, but locks the sector into a niche market; (3) *Productive greening* opens the sector based on science and innovation. This scenario removes any production restrictions from the standards that are not supported by science, while increasing animal welfare requirements and incorporating new findings. Implementation is expected to boost profitability of organic production and result in large growth of organic agriculture, with maybe 50% of land use adopting organic practices; (4) The *two-tier standards* scenario where the organic movement offers productive greening as an entry level to OA, and remains its cutting edge with the quality & value or *Best Practices* approach. This two-prong scenario relies on national standards for the entry level and private standards for best practices. Innovation is mainly focused at the Best Practices level, but feeds back into and elevates the entry level standard. The two-prong approach is communicated to consumers through dual labelling and an education initiative, which already has proven feasible and successful in Europe.

Using a list of evaluation criteria, the authors clearly favour Scenario 4, which maintains OA as a leader in holistic sustainability but can also massively expand land use (download).

While the history and context are somewhat dif-

ferent, I believe that Ontario can learn from how the European discourse proactively addresses current weaknesses of OA and lays out potential future pathways. The proposed split of the organic movement is aimed at maintaining the movement's unity and success - a somewhat counter-intuitive strategy that makes sense to me.

Agriculture at the boundary

by FREEMAN BOYD

Grey County is nearing completion of a **Natural Heritage Study**, intended to identify and quantify the 'natural' assets of the County. The great bulk of these assets are privately owned and most of them border farm operations. GBCAE realizes that the length of the boundary between agriculture and nature in Grey Bruce is a major contributor to biodiversity, and the benefits that flow from it. Because we are a biodiversity hot spot, Grey Bruce farmers are already being asked to contribute an oversized portion of environmental services, and Studies like this can only up that ask. While being squeezed between agro-economics and agro-ecology, remember the species at risk we are being asked to help face the very same squeeze - they need farm intervention to sustain their habitat, but not too much intervention. It seems both area farmers and species at risk have an interest in the terms and conditions of agriculture at the boundaries.

Global Warming or Local Cooling ?!?

by THORSTEN ARNOLD

I am hungry - the world must be very food insecure! Now I just ate my double burger, and am feeling full - the world must have overcome hunger! Similarly short lines-of-argument are popping up everywhere in Ontario these days, and climate deniers and climate procrastinators celebrate by doing nothing. The Great Lakes surfaces are frozen, lake levels are expected back to historic normals, and February 2015 record cold. Meanwhile, Sao Paulo is the first Mega City in the Americas that has definitely run out of drinking water - an interplay of pollution, deforestation, poor soil management in agriculture, and global climate change. Europe is experiencing a series of record-warm winters, and the Arctic continues to provide great mining opportunities due to receding ice cover. How does this all fit together?

A 2013 article in Scientific American (Riser and Lozier, Feb) may explain how interactions between the



oceans and the atmosphere are causing our current winters. The article re-visits something most of us learned at school: the role of the Gulf stream in transporting heat to the northern latitudes of Europe, warming the regional climate. Modern arrays of sensor buoys, combined with coupled ocean-atmosphere models, debunk this classic story as too simplistic. Instead, data suggests a combination of effects during winter: a low pressure system stabilizes over the Atlantic and high pressure dominates the Great Lakes. In such an atmosphere, the jet stream is displaced and pulls Arctic air towards On-

tario, while warm air flows influence Europe. In the form of warm clouds, this air flow brings additional latent heat from evaporation in the North Atlantic. The influence of global warming on this pattern is complex, interacting with global oscillations (El Nino, Arctic and North Atlantic). The good news: If over the next years, climate change stabilizes this pattern, at least we don't have to worry about blowing snow once the lakes are frozen over. Planting time is also a bit later then, giving us time to perfect how we give our transplants a head-start!

What's Next?

Towards a distribution alliance of local food

Several producers in the Grey Bruce area recently received a GF2 grant for developing a group business plan for a food distribution alliance. The objective is to deliver food from a range of producers to individual customers, and eventually offer a full shopping basket that includes locally prepared frozen meals, dairy products and shelf-stable goods. We are currently performing a group business plan to provide with food that is local, top quality, healthy, affordable, environmentally sustainable, and convenient. Keep your eyes open!

Agroecological pest management

We will offer a three-part workshop series this summer on agroecological pest management practices. They are delivered by Chuck Mitchell, who has many years of experience teaching agroecology in Vermont, Latin America, and around the world. Topics, dates and times are as follows:

Date	Time	Location	Topic
May 21st	4:00 - 7:00 PM	<i>Persephone Market Garden</i> #241063 Conc 3 Park Head, N0H 1A0	Indigenous Microorganisms
June 25th	4:00 - 7:00 PM	T.B.D	Plant Teas (fermented and extracts)
July 30th	4:00 - 7:00 PM	T.B.D	Mineral Mixtures

All workshops are on Thursday early evenings - child friendly. Costs are anticipated around \$20-30 per person, including take-home materials (extra materials may be sold at self costs, check our website). Potluck afterwards.

Work with us !

Interested in working on issues surrounding food and agriculture? In need of local expertise? Get in touch! We are happy to work with individuals, organizations and businesses to foster the development of resilient farming and food systems and within the group, we have a wide range of skills and knowledge to contribute.