



2016 Cloverbelt Regional Solution





CLOVERBELT LOCAL FOOD CO-OP: TOWARDS A REGIONAL SOLUTION

The Cloverbelt Local Food Co-operative (CLFC) is a registered non-profit, multi-stakeholder online food co-op in Northwestern Ontario. A first of its kind, it strengthens food security by encouraging diverse local food production and distribution, thereby enhancing overall rural sustainability. It strives to foster a thriving local food community by cultivating & facilitating farmer-consumer relationships; promoting the enjoyment of naturally grown, fairly priced, healthy food; and by providing education & resources regarding environmentally sensitive agriculture.

Formed in 2013, the idea stemmed from a [food hub workshop](#) hosted by the Northwest Training & Adjustment Board (NTAB) and Food Security Research Network (FSRN) in late 2012. These types of gatherings are critical to empower communities with the tools, ideas, and connections needed to mobilize effective solutions. In this case, the problem was a disjointed agricultural community. The online food Co-op is now reviving the agri-food sector by uniting the local food consumers with area farmers, and enabling year-round local food sales through a convenient, modern mechanism.

The Co-op offers locally produced, harvested, or created goods on a weekly, year-round basis. 95% of its goods are produced within Northwestern Ontario. Primary mandates are to increase the amount of local food and sell locally, support environmentally friendly & sustainable farming practices in the area, and become a self-sufficient organization. Early, enthusiastic community based support from organizations like NTAB, that were willing to offer support at the grassroots level, were instrumental to the rapid growth and acceptance of this organization.

The online model introduced by Cloverbelt is a Free and Open Source website software successfully used in other parts of the world. The Open Food Source (OFS) software can be used to coordinate synchronous ordering and deliveries of food across a range of organizational models and geographic situations. This unique innovative, modern technology is in a multi-stakeholder Co-op format that has created an opportunity for consumers and community organizations, along with producers, to become directly involved in increasing access to sustainable local foods in Dryden, through financial support and in-kind contributions. Being geographically isolated, the online model has successfully demonstrated the potential in a completely rural, remote center without any reliance on an urban community. The rural community of 8,000 people is situated 350 km from any major city (halfway between Winnipeg and Thunder Bay), affording the Co-op a unique, unusually large and dispersed market area.

The Cloverbelt Local Food Co-op had 860 members by two years of operations, and distributes to five Northwestern Ontario communities with plans for further expansion.

COMMUNITY GREENHOUSE

In 2014, thanks to encouragement from FSRN and support from NTAB, the Cloverbelt Local Food Co-op developed a [crowdfunding campaign](#) to increase community support. There were several goals of this project:

- To promote CLFC, and raise awareness of its presence and objectives through an online campaign, which featured an engaging [video](#)
- To provide a visible local food structure in the community

- To create a space to provide educational and knowledge transfer opportunities between retiring farmers and next generations
- To increase the supply of local food both in the short term (in greenhouse beds) and long term (through skills taught)

<http://thedrydenobserver.ca/2014/06/community-greenhouse-project-begins/>

2015 saw the completion of the 32' by 148' CLFC Community Greenhouse, with (18) 12' x 4' raised beds constructed by the Dryden Highschool Construction Technology class. The construction of this greenhouse allowed for Cloverbelt to increase their educational presence in the community. Our community outreach efforts focused on hosting events in the community that complimented the promotion of local food, agricultural sustainability and education.



The greenhouse enriched the connections between the community and the local agricultural, economical and nutritional food opportunities. Below are some of the projects, events, programs, and sessions that were facilitated at the greenhouse. Most of these initiatives were supported by CFLC's Education Co-ordinator (NOHFC intern Chelsea Szachury).



At the Grand Opening, people filled the greenhouse eager to learn more about the Greenhouse project and the local food movement of CLFC. Media coverage extended as far as Kenora. Dryden Observer's report: (<http://thedrydenobserver.ca/2015/06/cloverbelt-greenhouse-opens-in-time-for-growing-season/>)



In the spring, an information night connected a very experienced greenhouse grower and farmer, with greenhouse participants. He provided an abundance of quality information that inspired attendees and increased their confidence about planting for their first season. Four plots were designated for school education, two for community organizations, and the remainder were available to the members in the community to grow their own foods for their families.

A complimentary composting program was initiated to provide an eco-friendly disposal space for plot users to dispose of weeds and garden scraps. This initiative was overseen by a local highschool student, providing him with an opportunity to build responsibility, and learn a wealth of knowledge from farmer mentors regarding agriculture in the area. CLFC hosted several composting workshops with support from an area farmer, teaching the public the benefits and construction of composters.



Area schools used the greenhouse to enrich the curriculum with hands on local food learning. Students from the local schools began learning about planting and growing in the classroom and met with Chelsea to transplant into their designated school plot. An article covering one of the many educational sessions



that happened at the greenhouse - (<http://thedrydenobserver.ca/2015/06/growing-season-begins-for-local-students/>)



This education carried on into the classrooms after the summer was finished, and fall brought many in-class educational sessions.





The greenhouse also set up a small hydroponics system for educational purposes. Beans, peas, and tomatoes were grown successfully. The internal environment of the greenhouse offered the prime growing weather for the hydroponics. This hydroponics system was used to educate the public about an alternative growing mechanism, provide vegetables for classroom use, and give back to the community.



Workshops were offered to community members about how to use the fruits and vegetables harvested, in safe preservation methods such as canning and cold storage. These sessions were offered at no cost to the general public, as well as partnering with the Life Enrichment program at Patricia Gardens here in Dryden. NTAB supported programming for the Community Greenhouse.



NORTHWESTERN ONTARIO FOOD MAPPING AND TRANSPORT FEASABILITY PROJECT

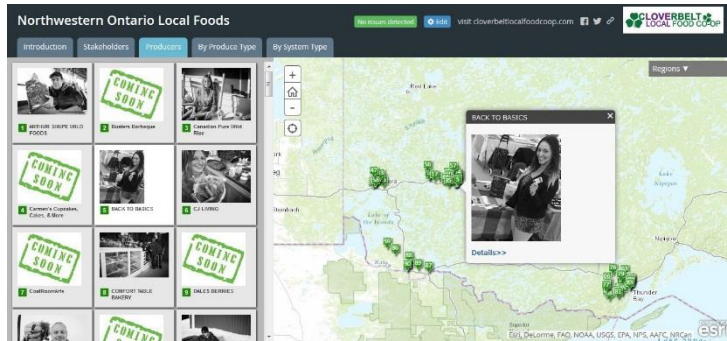
In 2014, the Cloverbelt Local Food Co-op was awarded provincial & federal funding to undertake an online Regional Mapping Project and transport Feasibility study, with support from NTAB. The mapping project will initially provide a snapshot of the current agricultural landscape of Northwestern Ontario. As time progresses, the software on which the mapping project is based allows for real time manipulation of data, providing an up to date picture of the ever changing food industry in Northwestern Ontario.

The mapping project has been broken up into several maps. Each map provides different details on aspects of agriculture throughout the region. The homepage displays all of the maps that are available on a scroll through banner. The banner also contains two forms that members of the food industry can access to add their information directly to the map that applicable to them. A screenshot of the homepage can be seen below:

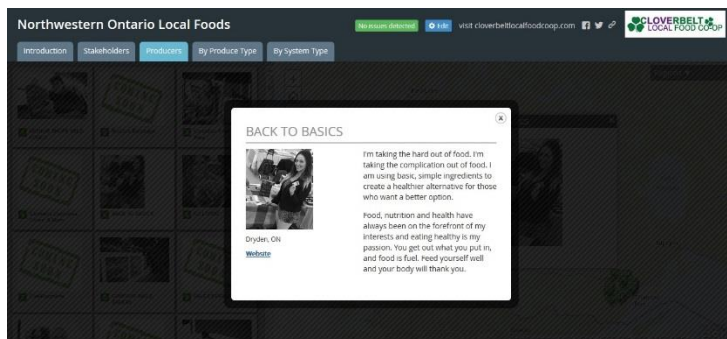


Cloverbelt's Regional mapping project homepage.

Our first map: Meet your Northwestern Ontario Producers, is a map designed to showcase producers, processors and distributors in the Northwestern Ontario Area. One of Cloverbelt's mandates is creating a connection between producer and consumer. As Cloverbelt is an online co-op, physically this isn't always possible. We wanted to put a face to a name of producers so that the public could see and read about the producers and processors that work hard to create produce, foods and goods in Northwestern Ontario. We want to show that these are PEOPLE, not faceless organisations. This map is open to ALL producers, processors and distributors in Northwestern Ontario. Cloverbelt members have a link on their profile popup which links directly to their Cloverbelt. This allows viewers to see what that particular producer has on offer via Cloverbelt.

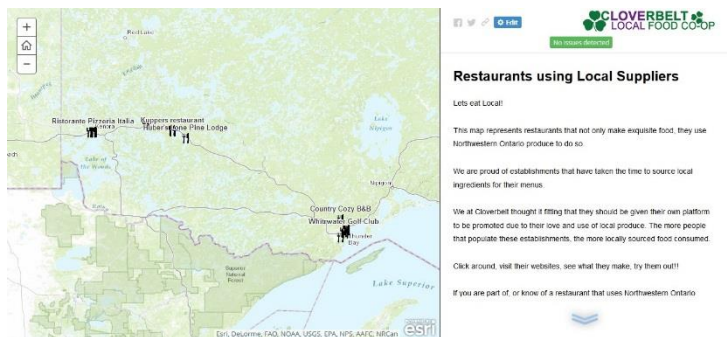


Producer map showing locations and picture profiles of producers

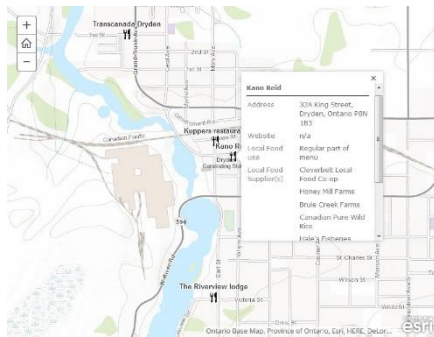


Producer map showing chosen producer story and location. Link in underlined blue takes user directly to that producers Cloverbelt page.

The Restaurant map is a map designed to publicize Northwestern Ontario eateries and Institutions that source and use local produce, meats etc in their menus. This map is designed to compliment and expand on the producer map. Not only do Producers and processors grow and create local food products for public consumption, they also sell their wares to restaurants and institutions (ie: hospitals). Users of the map that are interested in establishments that use locally sourced food can be found on this map. Details of the establishment can be found via their pop-up, along with the producers they source local food from. This creates a link to the producer map in that users can see which producers are used by eateries and can use the producer map to find out more about who the producer is and what they have to offer.

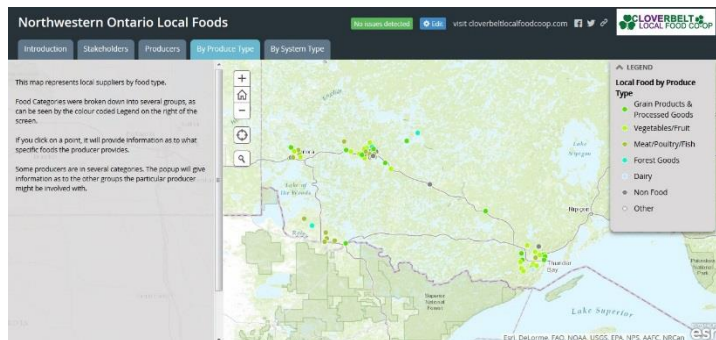


Restaurant layer showing establishments using locally sourced food.

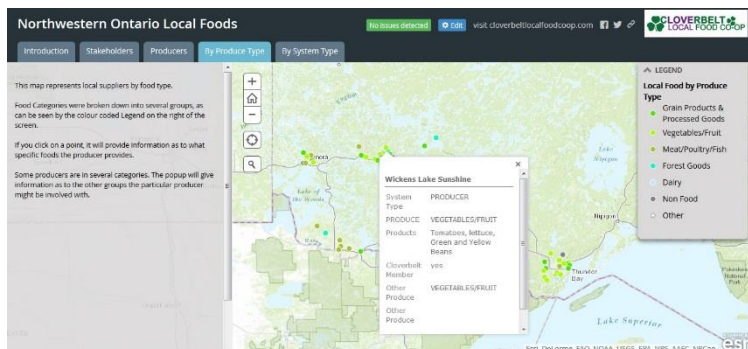


Restaurant map showing a particular eatery. Eatery details and a list of what they source locally is listed.

The Produce type map is a display of who makes what, where. The Produce type map uses the same data points from the Producer map yet displays a different information set. The data points are colour coded in relation to the food type legend. Food types have been categorized into major groups, making it easy to identify producer by these groups. Clicking on a particular points display the producer's information. This producer pop gives specific produce information as well as information regarding which major food categories they are in.

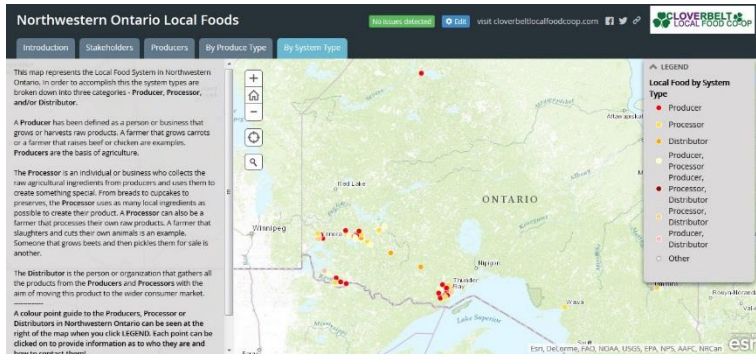


Produce Type map showing colour coded legend.

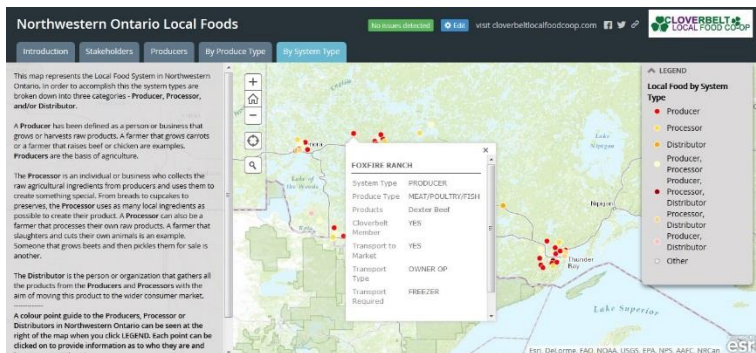


Produce Type map showing Producer pop-up details.

The System Type map displays information describing data points by Producer, Processor or Distributor status. Definitions of these terms are written on this map to give users a clear definition as to what each term means in relation to the map. Depending on the operation, a data point can be one of the definitions or a multiple of. The pop-up on this map for each point gives details as to their Cloverbelt membership status and details about what sort of transport they have access to and what sort of transport they would require if an in house transport system was developed by Cloverbelt.



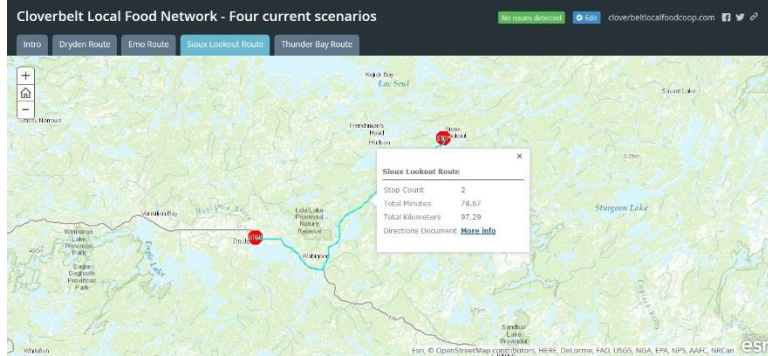
System Type map. Colour codes relate to which system types the data points falls into.



System Type map pop-up describing member status and transport information.

Apart from generating visual maps for public viewing to create awareness of local food production in Northwestern Ontario, another purpose of this project is to perform a transport feasibility study of Cloverbelt's current and future transport routes. As Cloverbelt has grown, it has established external hubs outside of Dryden. In 2015, distribution points in Sioux Lookout, Ignace, Upsala and Kenora were all established. As a result of expansion, the feasibility of transportation of goods via Cloverbelt has to be explored. GIS mapping provides excellent detail in relation to logistics coordination. Our Food Network maps have provided detailed information regarding existing and potential transport routes for the movement of food via Cloverbelt to Northwestern Ontario.

The Food network maps provide turn by turn details about the said routes. It provides exact distances and times for transport, as well as times for stoppages and delivery. Monetary details can then be attributed to these routes, giving a cost. This cost can then be related to the particular hub and its turnover. From there, we can deduct which hubs are feasible in their own right and which hubs need to be subsidised in the short term.



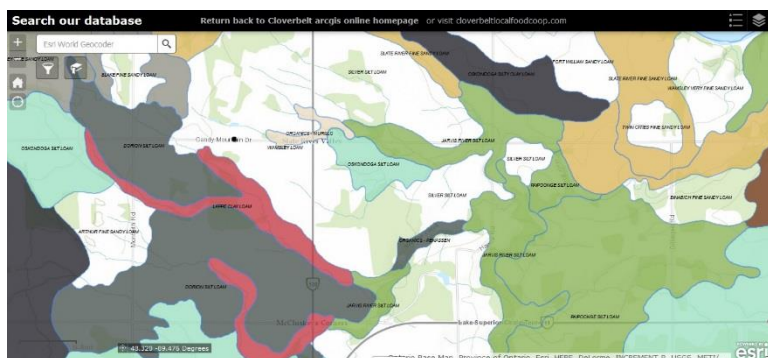
Food Network map showing the Sioux Lookout transport route.



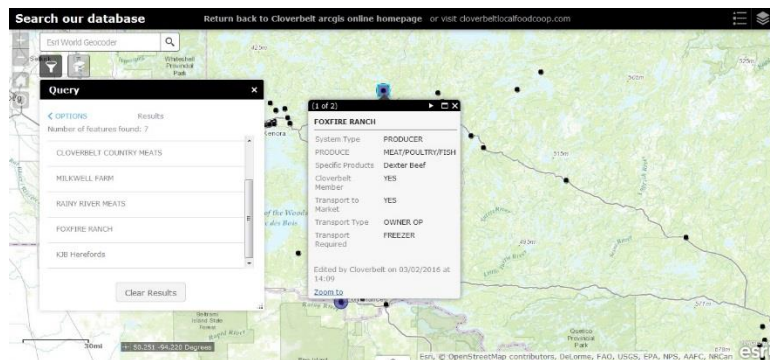
Turn by turn information with time, distance and stoppage details for Sioux Lookout route.

The final map is a query and soil map. This map has detailed soil analysis for selected regions of Northwestern Ontario. This can be used by potential producers that want to investigate soil types related to crop types if they are interested in particular plots of land that may be available.

The query map can investigate data points by key word throughout the whole area or by specific geographical location.



Soil map showing soil samples



Query map showing results for keyword search 'beef' in selected area.

The mapping project and transport feasibility study would not be possible without committed stakeholders like NTAB. It provides a much needed boost for the food sector in Northwestern Ontario. It is now possible to view a snapshot of what is produced, and where you can find it. Linkages have been increased between producers, consumers, and restaurants. The map and transport analysis will provide some of the needed framework to help CLFC continue to build a thriving local food network for Northwestern Ontario.