“Success Stories: local agri-food activities in the Northwest Territories, Canada, and stimulating Yellowknife’s local food economy”

Lone Sorensen
Yellowknife, Northwest Territories, Canada

The 8th Circumpolar Agricultural Conference & Arctic Inaugural Food Summit
Girdwood, Alaska: September 29 to October 3, 2013
Presentation Overview

- Three Introductions
- NWT & Yellowknife statistics
- The Yellowknife Commons Co-operative Ltd & Farmers’ Market
- Northern Farm Training Institute
- Challenges & Hurdles
- Northern Roots – programs and projects
Let me point out.......
Meet Lone Sorensen

Founder of Northern Roots:
A local approach to food production and community building

• Reinventing local food security
• Local food skills education programs
• Networking and linking key people
• Living it and getting it done!
Meet Amy Lizotte

Founder of Yellowknife Commons Cooperative
“Germinating a local food solution in Yellowknife”

- Community based research in 2012, MA Interdisciplinary Studies
- Farmer focused co-op
- Lead on Yellowknife Farmers’ Market
- Wishing to continue applied research – future Ph.D. candidate
- Expand local food solution in NWT
Meet Jackie Milne

President of the Territorial Farmers Association and founder of the Northern Farm Training Institute.

- Developed the first ever (as far as we know) NWT carrot seed, named River Root.
- Expert organic farmer and teacher. She was born and resides in Hay River.
Northwest Territories, Canada

Population 43,349

Farming statistics

<table>
<thead>
<tr>
<th>Acreage</th>
<th>NWT</th>
<th>Canada</th>
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</thead>
<tbody>
<tr>
<td>Under 10 acres</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>10 – 69 acres</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>70 – 129 acres</td>
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<td></td>
</tr>
<tr>
<td>180 – 239 acres</td>
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<td></td>
</tr>
<tr>
<td>240 – 399 acres</td>
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</tbody>
</table>

Average age of farm operators, 2011

- Of all farm operators: 57.3 in NWT, 54 in Canada
- On farms with one operator: 61.1 in NWT, 56 in Canada
- On farms with two or more operators: 48 in NWT, 52.6 in Canada
### Farming Statistics

*Derived from Statistics Canada 2011 Census, Farm and farm operator data*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef cattle ranching</td>
<td>2</td>
</tr>
<tr>
<td>Chicken egg production</td>
<td>1</td>
</tr>
<tr>
<td>Apiculture</td>
<td>1</td>
</tr>
<tr>
<td>Horse and other equine production</td>
<td>1</td>
</tr>
<tr>
<td>Other animal production</td>
<td>3</td>
</tr>
<tr>
<td>Potato Farming</td>
<td>1</td>
</tr>
<tr>
<td>Mushroom production</td>
<td>1</td>
</tr>
<tr>
<td>Food crops grown under cover</td>
<td>3</td>
</tr>
<tr>
<td>Nursery and tree production</td>
<td>1</td>
</tr>
<tr>
<td>Floriculture production</td>
<td>5</td>
</tr>
<tr>
<td>Hay Farming</td>
<td>3</td>
</tr>
<tr>
<td>Fruit and vegetable</td>
<td>2</td>
</tr>
<tr>
<td>Misc crop farming</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>
Yellowknife

• Population: 19,752
• Capital of Northwest Territories, Canada
• Latitude: 62°
• Mining heritage
• Days above 0 °C : 123
• Annual precipitation: less than 300 mm
• 231 Community gardeners
The Yellowknife Commons Co-operative Ltd.

Objectives

• Increase access to agricultural land in the Yellowknife region
• Revive Yellowknife Farmers’ Market
• Promote and educate on local food production
Yellowknife Farmers’ Market: New Beginnings

October 2012 ➔ Yellowknife Urban Farming Vision

November 2012 ➔ Community based research
(MA Interdisciplinary Studies)

January 2013 ➔ Yellowknife Commons Co-op Ltd

May 2013 ➔ City of Yellowknife, Council Meeting
(Urban Farming Development Meeting)

June 4, 2013 ➔ Yellowknife Farmers’ Market Opening Day!

Sept 17, 2013 ➔ Closing Day
Two green thumbs up

Fresh produce for sale at Yellowknife's Farmer's Market

I got a good spot with fun of fun.

Rebecca Alty, City Councillor

Mayor Mark Heyck

www.northern-roots.ca
Successes of the YK Farmers’ Market

• Total market vendor sales sum between roughly $10,000 – $13,000 per night
• $140,000 - $182,000 total vendor sales over the summer
• $504,000 – $655,200 total economic impact in Yellowknife
• Well received by public, estimated average of customers 300 – 400 weekly
Challenges of the YK Farmers’ Market

- Stricter guidelines surrounding locally *made* foods and products
- Financial sustainability of the market
- Need to hire a market coordinator
- Capacity to coordinate year round (meet the demand)
- Need to establish infrastructure
- Is the Farmers’ Market encouraging the growth of new farmers?
  - Currently assessing this with food growers who participated in the market
Next Steps: Winter 2013/2014

- Hosting a Winter Market and AGM
- Farmers’ Market Strategic Development Planning
- Business Planning Farmer Co-op
- Municipal and private partner cooperation to break land
- Building networks and partnerships
Testimonial from market

......thank you folks for the hard work that you've put into organizing and hosting the market. Your event has changed our downtown and our city. You've improved the quality of life of Yellowknifers and you've given entrepreneurs a great venue for testing out ideas. You've also created a tourist attraction that greatly enhances our visitors' summertime experience. Great job. Thank you.

Adrian Bell, City of Yellowknife Councillor
Northern Farm Training Institute

- Teaching how to grow and preserve local food, manage a business and be teachers in communities
- Workshops are designed around the growing season, with 28 students from 11 communities (2013)
- Students reported increased yield, new knowledge of local edibles, new greenhouses, and gardens built, workshops held and food preserved for winter
Growing Food in Yellowknife

Challenges

• Lack of arable land in many areas
• Lack of access to arable land
• Soil fertility
• Low precipitation
• High costs
Hurdles to Developing Local Food Security

- Government budget year is out of tune with nature’s seasons
- Lack of willingness to collaborate from some GNWT departments
- Government staff and students without growing skills are teaching and controlling Growing Forward funding
- Local aboriginal governments have been denied bloc funding in 2013
- Lack of Government facilitation in the creation of a local food security network
- Roles in creating local food security are not yet defined
- Burnout for key people on the ground doing the skilled work
“I teach people how to grow their own food”

Lone Sorensen
Yellowknife, Northwest Territories, Canada
Successful Projects

• Community Gardening Mentorship Programs in N’Dilo and Dettah
• Indoor School Gardening Programs – *From seed to plate*
• City of Yellowknife Organic Gardening Workshops
• Guided gardening tours

• Home garden consultations and support
• Young Offenders Food Skills Program
• Neighborhood Garden support
• Developing growing devices
• Sail boat gardening
• Growing food to feed my family
Organic Gardening Workshops
Community Gardening
Mentorship N’Dilo
School Gardening Programs

From January to April, 2013, 460 students and 44 teachers and education staff participated in two regions.
School Gardening Programs

www.northern-roots.ca
The Edible Wall

Student Testimonial: “We had no idea what we could grow”

April 2nd, 2013
May 21st, 2013
June 10, 2013
Product Development

Developing new growing devices for functionality, easy shipping, aesthetics and cost effectiveness.

Collaborating with Sunvision Asia Limited, International specialists in product design, engineering and outsourced production in Asia, Agrotech A/S Denmark, recognized consultants and experts in agricultural research.
Young Offenders Program

- Edible education
- Full spectrum literacy
- Transferable, essential life skills
- Produced 178.554 Kg on 210 square feet
- Staff, teachers and young offenders learned
Young Offenders Food Skills Pilot Program 2013
Sailboat Gardening on Great Slave Lake
(the lake as big as an ocean!)

Sailing for weeks without fresh food in past years.

2013 pilot on-board garden:
Finding fresh food solution

www.northern-roots.ca
The Future of Agriculture in the NWT

• Agricultural education must become a priority in all governments and communities. We must ensure higher quality teaching!!

• Connecting with our roots – mixed heritage – learning from and with each other in collaboration to continue merge hunting, growing and harvesting

• Develop ‘North of 60’ food growing skills apprentice-ship program
The Future of Agriculture in the NWT

- Organic, restorative agricultural development guidelines, policies and legislation without pesticides and without GMOs
- Educate, teach and mentor local people – minimum 5 year plan
- Set up applied research projects that triples up as practicum for agri-students and for cooperative growing for market gardeners
- We are a blank slate! With support we can easily teach 4000 NWT people in the next 5 years
Local Food Security – Watch it Grow!

Thank you to the people who supported me from the beginning and continue to do so
Joint Committee project on Arctic agriculture

• Researchers, gardeners and laymen from Canada, Denmark, Greenland, Norway, Sweden and USA.

• Promotes concrete cooperation between the three nations across a diverse range of scientific, environmental, economic, commercial and educational areas.
Joint Committee project on Arctic agriculture

Activities:
• Research on microorganisms associated with arctic agriculture
• Dissemination of results and establishing of local food security projects
• Organizing International conferences (Greenland June/July 2013)
Joint Committee project on Arctic agriculture

Being drawn together as a group by the love of our work and meeting in Greenland in 2013, we discovered something very special:

When two or more work together, miracles can happen .........
…..we can walk on water!

Photo courtesy of Greenland Agricultural Advisory Service in Qaqortoq
Thank you for joining me on this wonderful journey