Working Together to Grow More 3 Community Gardener Gathering 2016

Presented by the Arctic Institute of Community-Based Research



22 & 23 March 2016 600 College Drive Whitehorse, Yukon Territory Canada



Suggested Citation:

Arctic Institute of Community-Based Research For Northern Health and Well-Being

Marion, H., Friendship, K. 2016. Working Together to Grow More 3: Community Gardener Gathering 2016. Whitehorse Yukon: Arctic Institute of Community-Based Research. pp.32

The Arctic Institute of Community-Based Research gratefully acknowledges funding from the Yukon Government-Agriculture Branch Growing Forward 2, the Public Health Agency of Canada, and partnership funding from the Recreation & Parks Association of Yukon.

The views expressed herein do not necessarily represent the views of the funding agencies.



Public Health Agency of Canada Agence de la santé publique du Canada



A federal-provincial-territorial initiative



Executive Summary

In March 2016, community garden members from across the Yukon gathered to meet, learn from each other, and to hear presenters on topics ranging from growing and management techniques, to weather patterns and compost handling issues. The 54 attendees enthusiastically shared their expertise throughout. During the open-style sessions by northern presenters, growers and experts explored a range of topics from different corners of the food system.

Participants came from ten Yukon communities, seven First Nations, the City of Whitehorse, and five non-governmental organizations, spanning a total of 17 community gardens. Three years of inter-agency support for community gardens is showing: Eight new community gardens are establishing this year. The sharing of the dreams for the new gardens made the gathering especially fulfilling and exciting.

Participants were curious about how to grow local and imported fruiting shrubs and trees and stressed their desire to develop their techniques in working with nature as they develop their community gardens. Presentations on fruit and permaculture stoked interest and imagination in the participants. Greenhouse information was also sought. Presentations covered what design elements to consider, a tour of two greenhouses and details on greenhouse crop management. Participants left with appetites wetted for gardening and learning more ways to grow their community food sovereignty.



Photographs were taken by Ashley Bray and Katelyn Friendship, and edited by Heidi Marion; except where credited otherwise.

Table of Contents

Introduction	
Day One Sessions Side-by-Side: Building Soil/Using Relationships to Start a Community Garden &	
Greenhouse with Tracey Williams	
Growing Season 2014 with Heidi Marion	
Municipal De-Centralized Composting with Garret Gillespie & panelists	
Looking Back at Yukon Agriculture with Miche Genest	
Berries in the Garden with Val Celuszak	
Greenhouse Tour Series with Bob Sharp, Eoin Sheridan and Michael Brauer	
Let's Talk Budget & Record Keeping with Katie English	
★Eight New Community Gardens in 2016!	
Funding for Community Gardens with Brad Barton	
Day Two Sessions Remembering our Champions with Michael Brauer	
Questions from Day One Evaluations	
WildWise Yukon with Heather Ashthorn	
Building Soil Fertility: YG Trial Compares Soil Amendments with Brad Barton	
Food Forests: When Wild Locals Meet Exotic Foreigners with Agnes Seitz	
Actively Aerated Tea (AAT) with Heidi Marion	
Greenhouse Production with Kathy Kruse	
Introduction to Seed Production with Mel Sylvestre	
Ways to Assess Soil with Fay Branigan	
Conclusion	
Appendices	
i. Agenda	
ii. Email List	
iii. Presenters' Notes, Slides & Handouts	

Introduction

For the third year, *Working Together to Grow More* brought growers together from community gardens across the territory. Participants used this community gardener networking opportunity by meeting and sharing information about funding, management and growing techniques. **Heidi Marion** (Foodscapers), a local gardening

expert, facilitated dynamic discussions and sessions throughout the two days.

The purpose of the gathering was to provide a combination of northern growing experts, space, and time for growers to learn and to discuss ways to create and improve community gardens. At last year's



Participants shared ideas at the gathering.

gathering, participants called for

more information on **seed production and saving**. They also asked for more **time to talk informally** to share lore and experiences. Creating enough **compost** to **maintaining fertility** in soil is an ongoing challenge for community gardeners who continually search for ways to increase compost production. Our eighteen presenters and panelists explored all three topics from different angles. Extra time was dedicated



Katelyn & Norma of the Arctic Institute of Community-Based Research.

for informal and in-session discussions during the gathering. Most participants were new to the gathering, with seven having attended a previous gathering.

The gathering was supported by the Yukon Government Agriculture Branch Growing Forward 2, Public Health Agency of Canada, Recreation and Parks Association of Yukon, and was hosted and supported by the Arctic Institute of Community-Based Research.

စာDay One ေ

The workshop began with an opening prayer and welcoming remarks by **Norma Kassi** (AICBR). We dug right into the gathering sessions after Norma's opening.

Side-by-Side

Building Soil and Using Relationships to Start a Community Garden & Greenhouse

Grower **Tracey Williams** presented on the interplay between the work of building soil and using relationships to start a community garden and greenhouse. Her experience was in the fly-in community of Lutselk'e, NT, a community of ~250 on the eastern arm of Great Slave Lake. The remoteness required Tracey to use local materials and to engage

volunteers to establish the community garden. Tracey recommends starting small, and passed along this kernel of truth:

"Just grow one small area, and do it well. Then once you have it right, grow more!"

-Alan Chadwick

Volunteers salvaged materials used to build beds. They scavenged new housing developments for excavated soil. The

Tracey Williams talks about her deep community involvement in Lutselk'e.

community was mined for topsoil in areas where there is a lot of organic matter. Volunteers were recruited by word-of-mouth and by using media like radio, television and Facebook. The compost area was made inviting with sod couches in a hang out spot.

Children were involved in several ways:

- The school was given a worm composter for the kids to manage.
- Students at the school started seedlings.
- Students wrote stories of their food growing experiences.
- Q A "Teens Eat Lettuce" day had youth picking and eating their own salad greens.
- Q A sandbox was made for kids to play in while their parents work in the garden.
- Q A prenatal and young mom's group was included.

The growing "bug" spread – individuals who were part of the community garden began to establish their own gardens at home.

The new community gardeners built a story together and enjoy spending time together. They think creatively to solve challenges. Tracey found that it is important to bring everyone in as a part of the endeavour and to recognize and thank people for all forms of contribution.

Resources

See Presentation #1 for Tracey's handout. <u>How to Grow More Vegetables</u> by John Javin Seeding Square: <u>http://www.seedingsquare.com/</u> Laidlaw Foundation Fund laidlawfdn.org/

Growing Season 2014

Sharing & Learning from Last Year's Experiences



After seeing and hearing about Tracey's garden start-up story, participants were given time to talk together in groups to share on the successes and challenges of the past year.

We found that there were many new gardeners at this gathering including a contingent of nine from Na-Cho Nyak Dun in Mayo. Experienced gardeners identified themselves to the novice gardeners and made themselves available for support and information.

There was a great atmosphere of sharing and a

general willingness to help expressed by the experienced growers.

Municipal De-Centralized Composting

Introduction by Garret Gillespie followed by panel & participant exploration

Centralized and de-centralized composting was defined and explained by **Garret Gillespie** (Boreal Compost Enterprises). Garret walked us through the world of compost from large municipal operations (centralized) down to small-scale neighbourhood and community garden compost systems (de-centralized). Centralized composting refers to compost factories. They are large facilities requiring extensive infrastructure, skilled managers and heavy equipment. When the mass of composting feedstock is large as with centralized facilities, composting continues all year, even in the circumpolar north.

De-centralized composting is small-scale. It too demands skilled managers and trained staff or volunteers. It requires small, simpler infrastructure and either human, mechanical or small equipment to turn the composting material. In the winter, systems like this where the mass of composting feedstock is small, composting stops because it freezes. There are many ways to compost so each neighbourhood or small community must explore what ways work best for their situations.

As a past operator of the City of Whitehorse Compost Facility, Garret hopes that decentralized compost will become the trend of the future. There are two main reasons why:

 Householders will become more engaged in handling and transforming their own excess compostable material (food scraps, yard trimmings) by being part of a neighbourhood or small community compost system. Daily handling will make consumption and waste habits clear. Better understanding and better use of food and all household compostable materials will reduce waste.



Garret explains two compost systems.

2. Compost facilities are high fossil-fuel burners. Small composting sites use little fossil fuels. Some small organics collection systems have eliminated it completely.

Garret's session expanded to include a panel of local compost experts: Kathy Kruse (community garden manager), Miles Hume (City of Whitehorse Organics Coordinator), Mitt Stehlin (compost activist), and Tracey Williams (compost system developer).

Ideas and resource suggestions arose from participants and panelists:

• Danny Lewis (Raven Recycling) will come to the community and do workshops on recycling.

- Heidi Marion (Foodscapers) will do community compost workshops.
- Worm castings are highly concentrated humic compost, filled with nutrients.
- Kathy Kruse (Yukon College, Pelly Crossing Campus) uses the pallet system for her scale of composting.
- **Miles Hume** (City of Whitehorse) told participants that the CoW has a residential pick-up program and takes commercial feedstock and sells the finished compost in bags or by the cubic yard.
- The CoW has a centralized site and advocates for neighbourhood-based sites as complimentary.
- Mitt Stehelin (compost activist) collected waste from local businesses and delivered feedstock to the Downtown Urban Gardeners' compost system in Whitehorse. Mitt described good relationships with the grocers and how his inspiration to act comes from seeing the colossal amount of food we waste as a society (about 40%).
- Panellists typically used the word "waste" as a verb and not as a noun in the context of our food system. Food is never waste or garbage so let's not treat it that way or talk about it as though it is. This shows how our word choice is defining:

"Put your food scraps in the bucket." (Food is a resource.) "Put your food waste in the bucket." (Food is garbage.)

• **Tracey Williams** has experience with de-centralized composting and has taken a municipal-level course in composting. Yellowknife recently started their own

centralized composting pilot for diverting food waste from their landfill.

- We need both centralized and de-centralized systems.
- A "food rescue" idea is having a public gourmet dinner made from salvaged food
- How do we get community members onside so compost is not mistreated?
- We are accustomed to having food wrapped in plastic. This is a problem for de-centralized compost managers because plastic



Tracey, Mitt, Kathy, Miles & Garret talked with participants about community composting strategies.

ends up in the feedstock, slowing down the composting process. It must be removed by hand. How can we reduce the packaging on food?

Well-managed compost has dedicated, trained compost workers (whether paid or voluntary). It wins community approval because it has low or no odours and makes fine compost for local gardens.

Poorly managed compost attracts animals and is smelly. The community turns against it because it smells badly due to a lack of air (fixed by turning) and yields a small amount of lower-quality compost.

"Greens" are nitrogenous feedstock like food scraps and grass clippings. "Browns" are more carbonaceous feedstock like straw, leaves and paper products. Getting the balance of greens to browns right is part of the art of composting.

Resources

See Presentation #2 for Garret's slide presentation. <u>Too Good To Waste</u> National Geographic, March 2016 <u>The Rodale Book of Compost</u>, Rodale Institute (Whitehorse and EMR libraries) <u>Waste Not Want Not</u>, Biocycle Magazine, May 2016

Looking Back at Yukon Agriculture

Miche Genest shares her findings

Miche Genest (writer, author, chef) shared her current research on the early history of agriculture in the Yukon. Miche described some of the larger farms that existed and told us about their productivity using historical data on crop yields. Miche's research on the topic is in progress as a project for the Yukon Agriculture Association.

Miche shared the evidence she found of farmers' resilience, experimentation, adaptation, collaboration, and the ability to feed the community.

She described how Yukon First Nations as hunter-



Miche Genest shared her research on the history of agriculture.

Photo: Cathy Archbould

gatherer societies have also farmed, and how experimentation and adaptation started very early on (1800's).

- The first to farm in the Yukon was Robert Campbell. He grew root vegetables and barley, setting up a garden at every fort established.
- Scurvy and starvation was the mother of invention at Forty-Mile and colonists started to grow vegetables there.
- With the Gold Rush there were 12 market gardens established by settlers around Dawson City in 1898, and some small farms in early 1900's.
- Active farming in early 1900's until 1920's started to become mechanized, requiring fewer horses and therefore less hay.
- ❀ A drop in population reduced the amount of farmers. Next, the construction of the
- Alaska Highway meant food from the South was easier to get and demand for local food diminished further.
- * The Yukon Agriculture Association was established in 1974 to promote farming.
- Today farm gate sales, the creation of Growers of Organic Food Yukon (2003), farmers' markets, access to local food, and a tremendous interest in food security and food sovereignty is slowly reviving the local appetite for local food.

Resources

See Presentation #3 for Miche's notes.

<u>Humble Dreams: An Historical Perspective on Yukon Agriculture Since 1846</u>, Sally Robinson, The Northern Review 32 (Spring 2010). (Available as a download from <u>http://journals.sfu.ca/nr/index.php/nr/article/view/16/160</u>.)

Berries in the Garden

Wild and non-native growing, medicinal properties & accessibility as we age



Berries are one of **Val Celuszak's** passions. Val provided participants with her best cultivation information on a variety of berries that she has had success with. Much of it came from the University of Alaska. Val has owned and operated her bedding plant business called Raven's Edge in the Hamlet of Mount Lorne for 25 years.

Dawson tree farmer **John Lennart** dropped in for this session and made himself available for questions on his specialty – food-bearing trees and shrubs.

Val Celuszak describes how different berries propagate themselves.

Here are some tips from that session:

- Perennial crops need distance from aspen and birch trees as native deciduous will grow towards a well-watered garden in pursuit of water
- Stud the growing area with potatoes to assess where the ground freezes in late summer. (Potato growth will blacken and die after freezing.)
- Reduce the cover around the garden beds to discourage rodents
- Voles cannot climb...put a collar around your plants (plastic piping)
- Haskap berries are very hardy. Two different varieties are needed for pollination.
- Everyone has a unique garden and experience so observe and learn from your garden.

Resource

Val's information is in the folders handed out at the gathering.



Haskaps are extremely hardy, high-yielding plants.

Greenhouse Tour Series

After Val's presentation, participants broke up into groups and rotated around three locations:

1. Bob Sharp presented his three main greenhouse design principles, discussed greenhouse challenges and how he has used innovative designs to overcome them. Bob has had assistance from the Yukon Research Centre. See Presentation #4 for Bob's Slideshow. http://yukongreenhouse.weebly.com/



My greenhouse is <u>this</u> big!



2. Eoin Sheridan showed the Yukon Research Centre's on-site demonstration greenhouse to participants. Eoin explained the advantaged of their LED lighting system, water heat sink and retractable thermal panel insulating the greenhouse windows.

https://www.yukoncollege.yk.ca/uploads/Trehar ne%20Drury.pdf

3. Participants toured the Senior's Residence Community Garden. Lead gardener **Michael Brauer** explained the **hydroponic growing system** they use. Michael also went over the history of how the greenhouse was built and discussed infrastructure design flaws and corrections.





Community gardeners on greenhouse tour at the gathering.

Let's Talk Budget & Record Keeping

Farmer and community gardener **Katie English** (Narrow Gate Herbs/Full Circle Farm) shared her experience with how she plans and keeps records for crops, participants, volunteer hours, workshop attendance, and garden plots.

Katie shared her tool for getting garden members committed to completing their volunteer hours in the garden: She has a contract that each gardener signs to become a member. They agree to:

- Attend a monthly work party
- Put a deposit down, which they get back at the end of the season if they fulfill their contract terms

Katie uses school and home economics classes to engage participants. She employs people from disability and work-ready programs by using the greenhouse as a skill-building tool to increase employability.

Community gardeners enact economic initiatives for sustainability by:

- Selling things on the side to bring in funding
- Fundraising through community dinners
- Teaching workshops and collecting registration fees from participants
- Membership (user) fees
- Garage sales for tools and other resources (pots, etc.)

★ Eight New Community Gardens in 2016!

Heidi took a few minutes to ask participants about new gardens establishing this year. There were representatives from **eight new community gardens** from around the territory and one in Atlin, BC:

Community Gardens	Champions at Gathering
Grow Atlin	Vincent Esquiro, Marvin McDonald, Jim Boagey
Canada Games Centre, Whitehorse	Carmen Lindsay
Anglican Church, Whitehorse	Michael Brauer
Whistle Bend Subdivision, Whitehorse	Jesse Jewell
First Nation of Na-Cho Nyak Dun, Mayo	Helaina Moses
Teslin Tlingit Council	Nadine Peters
Whitehorse Food Bank	Kyla Merkel
Lewes Condo Village Community Garden, Whitehorse	Lauren Waters



Katie English shares her strategies for developing a budget.

Funding for Community Gardens



participants.

YG Agriculture Branch's Field Technician **Brad Barton** investigated sources of community garden funding for us. He encouraged participants to prepare for any application process by developing three key things:

- 1. Before looking for funding, **find your champions** and build a team.
- 2. Plan: **Consult** your community and **focus your efforts**. What are the priorities?
- 3. Create a budget.

Here are the funding sources Brad located:

TD Bank Friends of the Environment Foundation <u>https://fef.td.com/local-projects/</u>

Google search: Garden Funding Programs Canada;

- Environmental Programs Funding Canada
- Small Change Fund (crowd funding)

https://smallchangefund.org/i-have-a-great-project/

- @ Growing Forward II http://www.emr.gov.yk.ca/agriculture/funding_programs.html
- Community Development Fund <u>http://www.cdf.gov.yk.ca/</u>
- Municipalities- City of Whitehorse Environmental Grant <u>http://www.city.whitehorse.yk.ca/departments/environmental-sustainability/environmental-grant</u>

Private Sector

There was some collective wondering about what has become of the **Pine Creek Experimental Farm**, 5 km west of Haines Junction. Will Yukon College buy it for research purposes? Brad will consult with Yukon College.

Resources

See Presentation #5 for more information.

Organizers invited all participants and presenters to meet at the Bennet Post room (Westmark Whitehorse) to talk over dinner. The facilitator encouraged participants to **harness this opportunity to informally gather** and get to know one another by digging more deeply into each other's gardening experiences.

ഇ**Day Two**രം

Remembering our Champions

Michael Brauer (Senior's Residence Community Garden) opened our second day by remembering Rick Griffiths, his friend and a community garden champion who passed away in January. Michael then offered space to other gathering participants to share thoughts on any other garden champions who passed away recently. Will Jones remembered Claude DuLac of the Haines Junction. Heather Ashthorn remembered Ruby Van Bibber of Tagish. Alice Boland remembered Carmacks' Dawn Charlie.

We heard about the wonderful contributions these individual made during their lives. They were key champions in their communities who encouraged and impacted others.



Michael Brauer remembering Rick Griffiths

"A single person's effort echoes into the future." -Participant

Alice Boland: "I really enjoy coming here. I get a lot and learn a lot from other people."

Questions Arising from Day One Evaluations

Facilitator **Heidi Marion** trolled the previous day's evaluations for gardening questions. Heidi shared them with participants and answers came from the group.

How can I decide how to price my vegetables?

- Price based on local grocery store prices for organic vegetables
- Cyber-Help for Organic Farmers has an index that is updated monthly: <u>http://www.certifiedorganic.bc.ca/rcbtoa/services/prices.html</u>

How can we use all the food we grow? (Too costly to hire harvesters; lack volunteers)

- Community gardens and farms: Share extra produce with women, children, elders, etc.
- First Nations and other groups: Make alliances with growers...Organize volunteers to glean produce

What is mulch?

Anything that covers soil is mulch: can be dead (wood chips, straw, leaves) or living ("green manure" like clover, peas or even chickweed) or plastic (black soil cloth or cover



to suppress weeds and retain moisture)

Mulch shelters soil preventing loss of carbon from the bare soil into the air

Mulch reduced the need for water by about two thirds – water once a week instead of three times.

• Mulch shelters soil life. If it is organic, it provides a home for soil life, too.

Where can I get season extension information?

Four Season Harvest, Elliott Coleman http://www.fourseasonfarm.com/books/

Floating row covers protect from spring and august frosts and block drying wind

 Cold frames can be used to start seedlings early and grow tender herbs like basil

Jonny's Select Seeds has useful videos on how to use garden tools

What are tips for garden maintenance?

- Keep up soil fertility (about 1 inch of compost, with wood ash, each spring)
- Take care of tools (clean, sharpen, repair, store in sheltered place)
- Require users to volunteer a certain required number of hours at the community garden

WildWise Yukon

Wild-proof your community garden

WildWise Yukon is a non-governmental organization that promotes positive wild animal/human relationships. Coordinator Heather Ashthorn talked about how the ways we set up our gardens and compost systems impacts the surrounding wildlife. Often it comes down to putting up a fence and/or electric fence barriers to keep



animals safe and from becoming getting used to seeking the food sources in our

community gardens. (Electric fences are not dangerous as they are low amperage giving a very mild shock.)

We gardeners work hard to grow food. Heather made the point that protecting wildlife from our gardens also protects our investments of hard work and money. Prevention is key because it can be costly and devastating when wildlife is able to get to your garden.

Electric fencing or electro-netting are recommended because other fences are ineffective. Canids like coyotes, foxes, wolves and bears are extraordinary climbers and jumpers. WildWise Yukon has demonstration kits and is happy to show how things like electro-netting work. http://wildwise.ca/home#be-wild-wise

Funding for Your Community Garden Fence:

<u>Growing Forward 2</u> has the Wildlife Compensation and Prevention program. It funds 50% of infrastructure costs for projects like fencing. Contact the Agriculture Branch for



information.

http://www.emr.gov.yk.ca/agricultur e/funding_programs.html

Participant Mary Jane Johnson underscored the importance of wildlife corridors and in recognizing what else lives in your area:

• We garden in the wildlife's home.

 Ask Elders about wildlife management and bear control... they have traditional practices.

garden areas.

Resources

See Presentation #6 for Heather's presentation notes.

Yellowstone to Yukon Conservation Initiative (Y to Y) is a wildlife corridor initiative trying to make a wildlife corridor from Yellowstone to Yukon. https://y2y.net/

Building Soil Fertility

Agriculture Branch Trial Compares Soil Amendments

(Presentation #7, #8) The Yukon Government's Agriculture Branch has trialed soil amendments on vegetable crops since 2010. Field technician **Brad Barton** presented findings that showed improved vegetable yields from two soil amendments: **City of Whitehorse compost** and **synthetic fertilizers**.

Other Canadian research concluded that organic-amended plots usually lag behind synthetic plots until the third year. Yukon growing conditions followed this trend. As expected, the synthetic fertilizer plots had the highest



yields in the first two years and the organic fertilizer plots yielded similar results by the third year. The compost plots yielded substantially less than the other treatments in the first few years of the trial.

In 2015, the Agriculture Branch finished their fifth trial year. They found that the compost treatment had equal yields to both the synthetic and organically amended plots. This indicates that the addition of city compost over time is a valuable soil amendment. This is the first year with results indicating that compost is on par with other amendments.

The trial will continue to evaluate compost and commercial soil amendments to add to our understanding of northern soil amendments. The addition of lime or humic acid or biochar does not have any impact on yields based on this research.

Brad also completed a review of weather over the seasons. He found that our summer temperatures and rainfall have remained fairly steady. Brad was surprised to find that our winters have become much warmer while our summers are unchanged. Our changing climate will mean we need to adapt our growing timing and increase the amount of water we use on our gardens.

Q Tip from the Field: Seeding by hand is hard work if you want to grow for a lot of people. Consider tools like a seed wheel to reduce the amount of thinning required.

Food Forests

When Wild Locals Meet Exotic Foreigners (Presentation #9, #10)

Dynamic grower **Agnes Seitz** (chef, permaculture teacher and ED of the Lorne Mountain Community Centre) wove a fascinating tapestry describing the inter-relationships between **plant guilds** in her garden. A guild is a grouping of plants, trees, animals, insects, and other components that work together to help ensure their health and productivity. Agnes emphasized looking to nature when making garden management decisions to support this plant guild mutualism. This perspective resonated with the participants.

"I could listen to Agnes Seitz all day." -Participant

Agnes described the active community of gardeners of Mt Lorne and the LMCC's *Backyard Garden Series* where they do education, tours, and workshops within their community

Agnes outlined her garden process. It rests on four principles:

- 1. Poly-cropping,
- 2. Intercropping (2 rows of peas inside, spinach on either side, carrots and beets outside of that in each box)
- 3. Succession planting
- 4. Vertical planting

Agnes advocates for small-scale growing because it produces a lot of food. Agnes' own garden produces food for her and her partner with plenty of extra food used for community culinary events and gatherings.

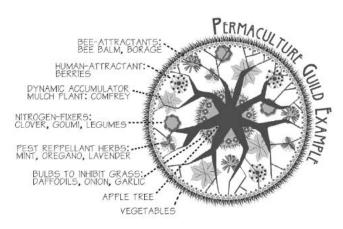


Photo: 2014 Maine NEPC

They preserve food by canning, drying, storing and pickling.



Actively Aerated Tea (AAT)

Growers can improve compost teas by adding air to breed good soil microbes.

At lunch, gardening consultant **Heidi Marion** set up a simple compost tea system that explodes bacterial and fungal populations.

Using an air pump, growers can change a steeped compost tea into an aerated compost tea. Air supports the growth of **good microbes**. When



Heidi Marion sets up an aerated compost tea.

watered on to soil, these microbes help plants to "eat" nutrients.

These microbes need **air and food**: To make actively aerated compost tea, bubble 5 gallons of warm water mixed with a bit of organic sweetener (molasses, sugar, agave etc.). Add one cup of compost, worm castings and/or soil. Bubble vigorously in a warm place for 12 to 24 hours. Use it right away by putting one cup of AAT to a large watering can and diluting with water. Repeat watering until the whole garden has been watered. This is a good way to stretch a limited compost supply.

Resource http://jaybeedynamics.com/compost-tea/

Greenhouse Production

Kathy Kruse (Minto Farm, Yukon College) walked participants through her greenhouse from spring to fall. Kathy went over what should be planted in a greenhouse and what should be planted outdoors. Here are some of Kathy's tips:

- Increase heat to extend season
- Plant heat-loving plants in greenhouse because warm space should be optimized
- Sterilize soil for seedlings by microwaving in batches for 5 minutes
- Tomato types: Determinate (short and bushy, ripen



20

all at same time and die) and Indeterminate (tall, produce ongoing)

- A greenhouse favourite is lemon cucumber
- "Best Cool" seeds from Fairbanks is a good cool-season seed source https://bestcoolseeds.com/
- Mulch in greenhouse using thin layers of grass clippings (later in season)
- Marigolds prevent bugs (work dead material into the soil, compost)

Resources

See Presentation #11for Kathy's presentation.

In the afternoon, the whole gathering moved to the **Community Loft** of Cliffside Garden Store and Greenhouse.

Introduction to Seed Production

Mel Sylvestre (University of British Colombia -Seed Hub) gave the first of two courses on seed saving. Mel told us that farmers everywhere lack access to locally produced seeds. In response to this paucity, the BC eco seed coop was born. Seeds are sold online. <u>http://www.bcecoseedcoop.com</u> (Presentation #12, #13)



Mel Sylvestre explains seed production techniques.



Why save seeds?

- no propagate hard-to-find varieties.
- To adapt to the climate we are in as it changes.Cost.
- So Where do commercial seed come from? We do not know what we are buying in relation to origin.
- ${m so}$ Seed banks preserve seeds for the future.
- so Chemical companies own most seed companies.

Open-pollinated seed are pollinated in the wild, IE self-pollinated.

Hybrid seed are selected for certain traits. This is done by crossing different varieties together.

Genetically Modified seeds have genetic traits extracted from other organisms (like fish) injected into the DNA strands of plants using viruses. Few vegetable seeds are modified in this way. Companies like Monsanto, Syngenta and Bayer do this mainly with crops like wheat, canola, soy and corn.

Ways to Assess Soil

Finally, Cliffside Country Store and Greenhouse owner **Fay Branigan** provided information on soil. Fay explained how to determine the acidity or alkalinity of your soil using basic ingredients: baking soda and vinegar. Fay provided a guide for caring for your soil.



The Next Day...

Two events followed the gathering to maximize the visits of Yellowknife guest **Tracey Williams** and University of British Colombia guest **Mel Sylvestre**.

Tracey presented the **Yellowknife Food Charter** to **Food Network Yukon**. This charter is document she worked on with the Yellowknife Market Society and the City of Yellowknife. <u>http://www.yellowknifefarmersmarket.ca/foodcharter/</u>

Mel taught **Advanced Seed Production** (Presentation #14) the day after the gathering, utilizing her Whitehorse visit to share with both participants and the public. Mel then headed to Dawson City where she again shared her seed production knowledge with Dawson's *Seedy Saturday* annual event.



Conclusion

The thirst for Community Gardener Gatherings continues unabated. Participants at this year's gathering reported massive growth: Half of participants' communities will be starting a new community garden this year! This growth is further evidenced by the vast majority at the conference who are new to gardening (about 80%). A shining example is the First Nation of Na-Cho Nyak Dun, with nine members (mostly youth) who went to Working Together to Grow More 3. A big shout out to Mayo!

In 2015, participants voiced a need for more information on **soil and compost**, **greenhouses**, how to incorporate **fruiting bushes and trees** and **seed production**. We covered each of these topics and more. The new topic of **Food Forests**, a permaculture method, was enthusiastically received because the guiding principle of **working with nature** resonated deeply with participants. With so many new participants, the topics that were covered in previous years such as community garden **funding and budgeting** were again explored and appreciated. Contributions on how **climate change** is making winters warmer and a field trial **comparing local municipal compost with synthetic fertilizers** were very engaging.

There was also desire for information on **traditional medicines**, but experts were not available this year. We will make sure we get that covered next time.

The base of community members who garden to **eat healthy food** is growing. An undercurrent at this year's conference is the understanding of our need to have a **reliable source of food that we want to eat**. Community gardeners who attended this year's conference were very interested in each other's experiences and wonderful dialogue permeated the gathering.

On their evaluations, participants expressed gratitude to the presenters for sharing their expertise:

"I loved the presenters on how they grew their garden from scratch, learning."

"After a somewhat disappointing harvest last year, it is inspiring to see successful gardeners."

"Remarkable amount of knowledge in this room!"

Because of the high proportion of new gardeners, there was a desire for **gardening training in all areas**. As we look to the future, we see a radical upswing in the need for new gardeners to have the skill instruction as they cut their teeth in their community gardens. Participants reported that new relationships with other community gardens have taken root and that they value the learning and networking that is the fruit of each Community Gardener Gathering.



Working Together to Grow More 3 - Community Gardener Gathering 2016

Thank you for making the Gathering such a great success!

Appendices

i. Agenda

Working Together to Grow More 3: Community Gardener Gathering 2016

AGENDA

Tuesday, March 22

8:15 Breakfast and Registration 9:00 Morning Session Begins:

Side-by-Side:

Building Soil and Using Relationships to Start a Community Garden & Greenhouse With Tracey Williams, Community Garden Activist from Yellowknife

Growing Season 2014

Sharing & Learning from Last Year's Experiences

Municipal De-Centralized Composting

Introduction by Garret Gillespie followed by panel & participant exploration

Keeping This Network Going

Brainstorming and commitments

Looking Back at Yukon Agriculture

Miche Genest shares her findings

1:00 Afternoon Session Begins:

Berries in the Garden

Wild and non-native growing, medicinal properties & accessibility as we age With Val Celuszak, Bedding Plant Nursery Owner, Hamlet of Mount Lorne

Greenhouse Tour Series

Tour two greenhouses & hear the latest northern greenhouse designer With Michael Brauer, Greenhouse Manager, Owen Sheridan of YRC and Bob Sharp, Greenhouse Designer and Fabricator

Let's Talk Budget & Record Keeping

Bring your community garden budget from 2015 With Katie English

Funding for Community Gardens

5:00 End of Day One Wednesday, March 23 8:15 Breakfast 9:00 Morning Session Begins:

Wild Wise

Keeping wildlife safe from your garden With Heather Ashthorn

Building Soil Fertility

YG Trial Compares Soil Amendments With Brad Barton, Agriculture Research Technician, Agriculture Branch, EMR, YG

Food Forests

When Wild Locals Meet Exotic Foreigners With Agnes Seitz, Intrepid Grower & Food Activist, Hamlet of Mount Lorne

> **Greenhouse Production** Kathy Kruse, McCabe Creek Farm, Minto

12:45 Afternoon Session Will Begin At:

Cliffside Country Garden Store & Greenhouse 7 Roundel Road (Now across from airport)

Introduction to Seed Production (3 hours)

With Mel Sylvestre, BSc Plant & Soil Health, UBC

Tour of Cliffside Greenhouse & Garden Centre

With Fay Branigan on Soil with Q&A Social with refreshments

Thursday, March 24

☆ 3-hour course, separate from gathering ☆

8:30 am Course Begins:

Advanced Seed Production

With Farmer Melanie Sylvestre, BSc Soil & Plant Science Founder of UBC's Seed Hub **Conference Room 4, Westmark Whitehorse**

ii. Contact List

Name	Email	Group
Tracey Williams	trux@eastarm.com	Yellowknife Food Charter/Com Garden
Mel Sylvestre	melthefarmer@gmail.com	UBC
Kathy Kruse	mccabecreekfarm@hotmail.com	McCabe Creek Farm/YC
Agnes Seitz	agnes@northwestel.net	Lorne Mountain Community Centre
Val Celuszak	valerieceluszak@gmail.com	Raven's Edge Nursery
Katie English	katienglish@gmail.com	Dawson Community Garden
Bob Sharp	bobsharp5@hotmail.com	Northern Greenhouse Designs
Garret Gillespie	garret@northwestel.net	Boreal Compost Enterprises
Randy Lamb	Randy.Lamb@gov.yk.ca	Ag Branch
Brad Barton	bradley.barton@gov.yk.ca	Ag Branch
Carmen/Cynthia	carmen.lindsay@whitehorse.ca	CoW Rec & Facility Services
Miles Hume	miles.hume@whitehorse.ca	CoW Organics Coordinator
Jennifer Hall	admin@yukonag.ca	Yukon Agriculture Association ED
Faye Branigan	fay@thegreenhouse.yk.net	Cliffside Garden Store & Greenhouse
Miche Genest	mgenest@northwestel.net	Agriculture Writer & Chef
Lauren Waters	laurenwaters1@hotmail.com	Lewes Village Condo Community Garden
Kyla Merkel	office@whitehorsefoodbank.ca	Whitehorse Food Bank
Ingrid Wilcox	Ingrid@northwestel.net	Lubbock Gardening Consultant
Jesse Jewell	jesseojewell@gmail.com	Whistle Bend Community Garden Whitehorse

Vicki Joe		Selkirk FN Community Garden
Jean Van Bibber	vanbibberj@selkirkfn.com	Selkirk FN Community Garden
Christina Sam	reception@whiteriverfirstnation.com	WRFN Community Garden, Beaver Creek
Ginny Prins	inanda@shaw.ca	Seniors' Residence Community Garden, Whitehorse
Gail M. LaRoque	gmlaroque4@gmail.com	Seniors' Residence Community Garden, Whitehorse
Gay Read	windblown2@outlook.com	Seniors' Residence Community Garden, Whitehorse
Katelyn Friendship	katelyn@aicbr.ca	AICBR
Heidi Marion	heidi.e.marion@gmail.com	AICBR/Foodscapers
Jodi Butler-Walker	jody@aicbr.ca	AICBR
Norma Kassi?	norma@aicbr.ca	AICBR
Ashley Bray	ashley.bray@mail.utoronto.ca	AICBR
Michelle Clusiau	mclusiau@northwestel.net	YAPC Tool & Seed Library Need Study
Diane Graham	dgraham@klondiker.com	Ta'an Kwäch'än gardener, Whitehorse
Kara		Ta'an Kwäch'än gardener, Whitehorse
Eoin Sheridan	esheridan@yukoncollege.yk.ca	Yukon Research Centre, Yukon College
Kevin Bayne	kevin.bayne@cftn.ca	CTFN Garden Coordinator, Carcross
Nadine Peters	teslinrec@teslin.ca	TTC Rec Programs, Teslin
Percy Allen	yukon.percy.allen@gmail.com	Comm. Gardener, Champagne/Aishihik
Will Jones	will@yknet.ca	Haines Junction Employment Development Society
Josée Tremblay	miningreclamation@nndfn.com	First Nation of Na-Cho Nyak Dun, Mayo
Helaina Moses	helaina.moses@nndfn.com	NND
Jarret Van-Bibber	20	NND

Sommer Mervyn		NND
Julius Hager		NND
Nathan Hager		NND
Shane Hummel		NND
Cecile Charette		NND
Ellenaise Profiet		NND
Vincent Esquiro	hss.mgr@gov.trtfn.com	TRTFN Dir. Health and SS, Atlin
Marvin McDonald	omh.clerk@gov.trtfn.com	Tlingit Family Learning Centre, Atlin
Jim Boagey	growatlin@gmail.com	Grow Atlin
Mary Jane Johnson	heritage.manager@kfn.ca	Community Gardener Burwash Landing
Alice Boland	aliceboland61@gmail.com	Little Salmon Carmacks Greenhouse
Dhilin Dolond		Little Columna Course also Curant autor
Philip Boland	pboland63@live.ca	Little Salmon Carmacks Greenhouse

iii. Presenters' Notes, Slides & Handouts

- 1. Tracey Williams, Soil & Relationships
- 2. Garret Gillespie, Compost
- 3. Michelle Genest, History of Yukon Agriculture
- 4. Bob Sharp, Greenhouse Design Principles
- 5. Brad Barton, Funding for Community Gardens
- 6. Heather Ashthorn, WildWise Yukon
- 7. Brad Barton, Soil Amendment Trial
- 8. Brad Barton, Soil Amendment Trial
- 9. Agnes Seitz, Food Forests
- 10. Agnes Seitz, Plant list
- 11. Kathy Kruse, Greenhouse Production
- 12. Mel Sylvestre, Introduction to Seed Production
- 13. Mel Sylvestre, Seed Production
- 14. Mel Sylvestre, Advanced Seed Production

All presentations and handouts can be found online at: <u>http://www.aicbr.ca/cgg-2016-presentations</u>. If you would like the PDFs of the above presentations sent to you please, email us at: info@aicbr.ca.



Massi Cho. Gwiinzii Edik'anaantii. Thank you. Take good care of yourself.