

# Exploring Subarctic Gardening Opportunities in Fort Albany First Nation

NCCIH Webinar - Indigenous Peoples, Food  
Safety and Security and Climate Change in  
Canada

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*Photo credit: Leah MacSeáin*



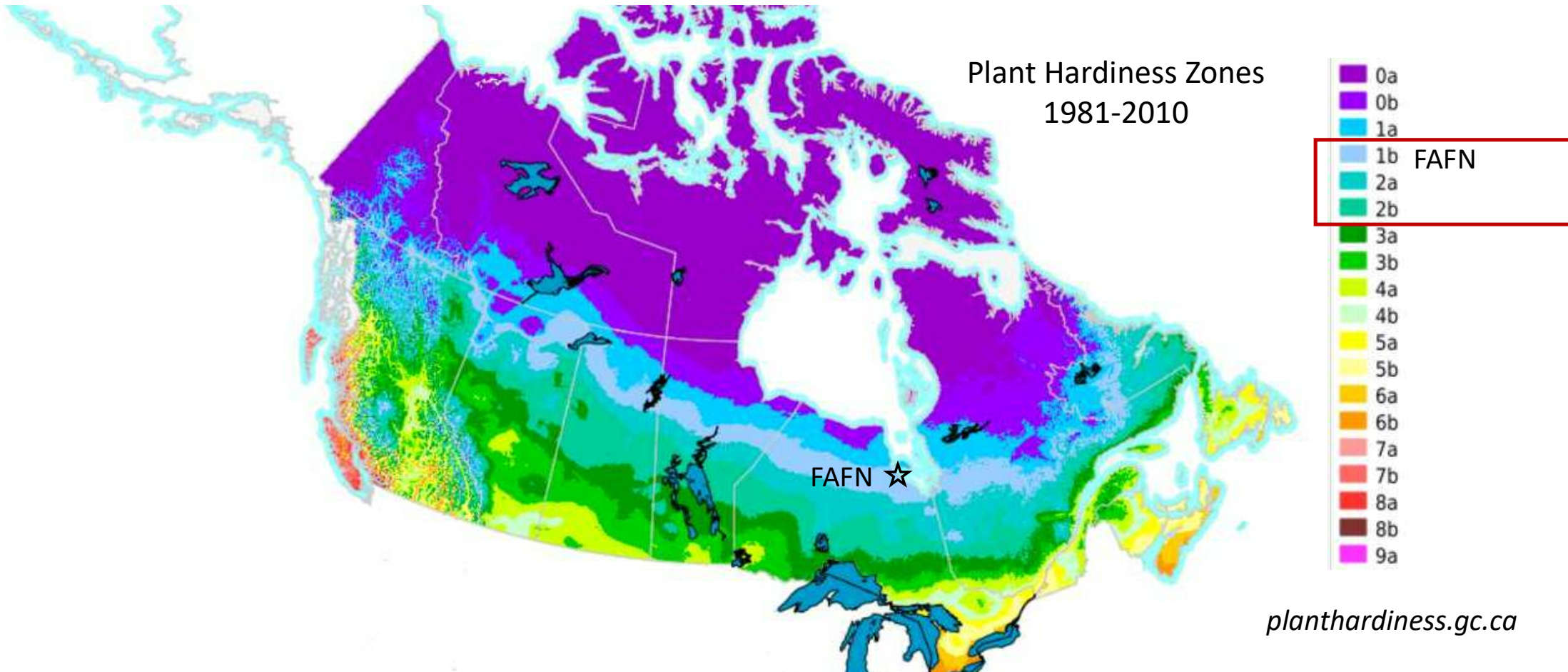
*Peetabeck Inninuk Nation*  
Fort Albany First Nation  
(FAFN)

Far North Ontario - 52°20'N 81°46'W



- Mushkegowuk Cree Territory
- Surrounded by wetlands
- Isolated fly in community
- No year round roads
- Ice road for 2.5 months
  
- Dependence on imported food
- Food insecurity rates is 70.3%
- Population of ~1,200





FAFN  
Climate Projections

Annual Mean	1976-2005	2020-2050	2051-2080
Ambient temperature	- 1.0 °C	+1.5 °C	+4.1°C
Precipitation	615 mm	658 m	696 mm
Frost-free Days	94 days	120 days	145 days

# Peetabeck's community garden



2012-2014

Subarctic shelterbelt  
production trials



2015-2017

Diversifying crops  
Incorporate perennials  
Add low-tech strategies



2018-present

Diversifying crops  
Add garden beds  
Enhance community gathering



## Goals for Climate Adaptive Northern Gardening

Utilize techniques that are regionally suitable



Harmonizing Indigenous knowledge & land-based activities with gardening



# Strategy Themes

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1. Building-up gardening capacity
2. Enhance garden environment
3. Support community outreach



*Photo credit: Greg Sutherland*



## 1. Building-up Gardening Capacity

### Assessment

- Suitable location
- Community & site history
- Soil analysis
- Accessibility
- Water availability



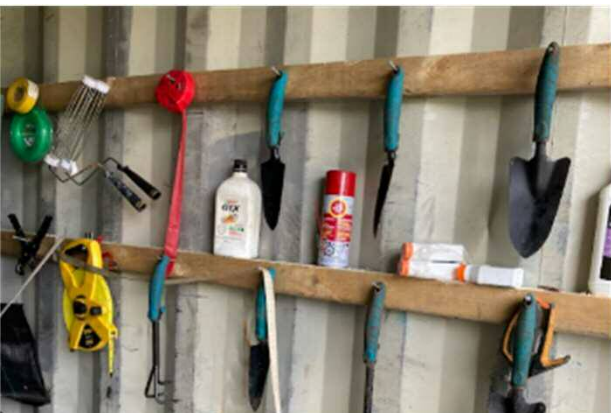




## 1. Building-up Gardening Capacity

### Procure Supplies

- Determine local sources
- Transport most supplies via the winter road
- Build-up supplies over time
- Shipping containers (sea-cans) are great for supply storage







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*1. Building-up Gardening Capacity*  
Community Garden Construction

- Identify community based Coordinator(s)
- Create a training and management plan
- Start small and expand appropriately
- Construct low maintenance garden beds





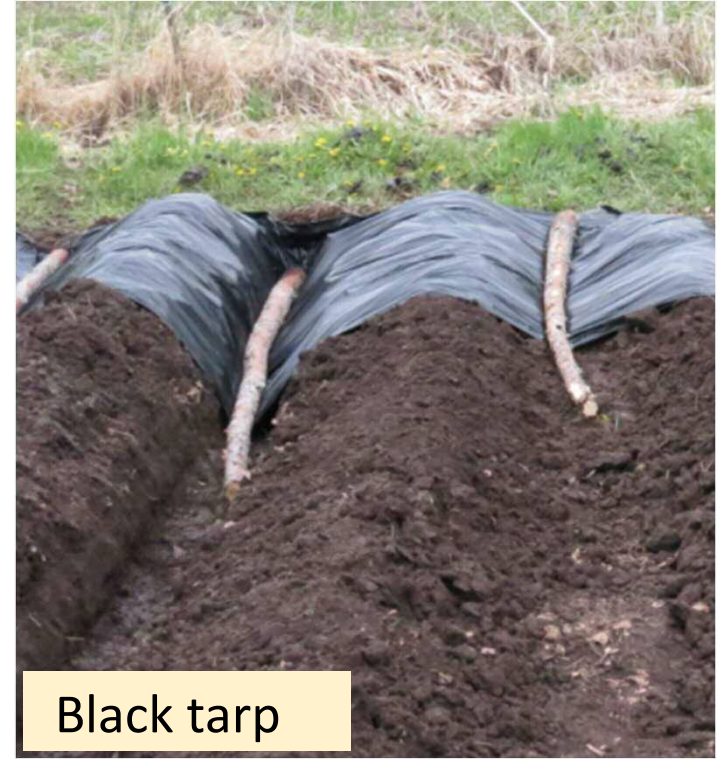
Windbreaks



High tunnels



Low tunnels



Black tarp



Raised beds

## 2. Enhance Garden Environment

### Improve microclimate

- Increase soil temperatures
- Increase ambient air temperatures
- Reduce cool winds
- Regulate soil water content





## 2. Enhance Garden Environment

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### Crop Selection & Diversity

- Cold tolerant
- Seed maturity 22-60 days
- Trial and error
- Crops that compliment traditional foods
- Currently exist / historically cultivated
- New crops and climate adaptable crops





## 2. Enhance Garden Environment

### Manage soil fertility

- Locally made compost
- Divert spoiled foods from landfill
- Leaf mulch
- Create bone meal from geese harvest







Employment & training



Harvest events



School field trips



Food sharing



Workshops

### 3. Support Community Outreach

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## Facilitate learning opportunities

- Create welcoming spaces
- Organize events
- Facilitate training
- Promote youth engagement





### 3. Support Community Outreach

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## Championing innovations

Examples:

- Home gardens & greenhouses
- Home made Composters
- Bush gardens
- growing “new” crops



# Expanded the Northern garden project to Miawpukek First Nation, NFLD

- Applying the knowledge gained from The FAFN garden program



OCT 2019



OCT 2020



SEPT 2021

Photo credit: Tim Drew





Meegwetch - Thank You

## Acknowledgements



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Thanks to the Conne River Health & Social Services and the community of Miawpukek First Nation.