



# Community Gardening in the North of Ontario

## Why Garden?

Healthy food

Increase self-sufficiency and Food security

Save money

Improved mental health

Exercise

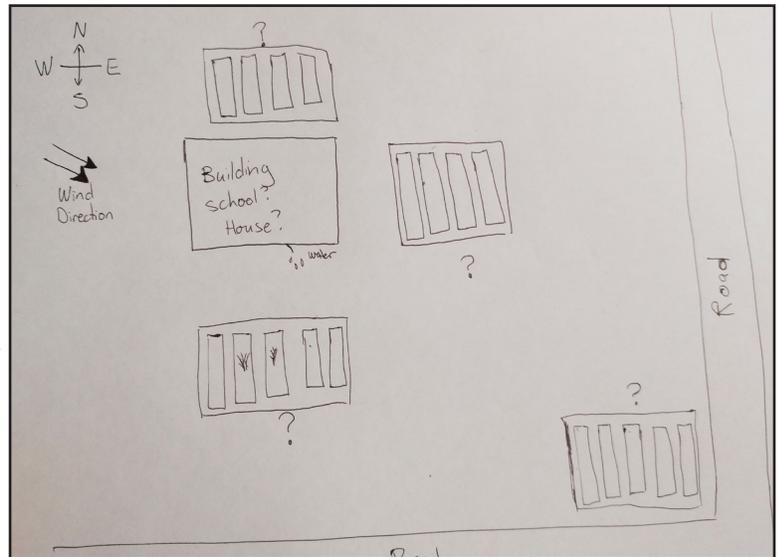
## Starting a garden in your yard or community

### The location

Draw simple sketch (like the one to the right) of possible garden sites within your yard or town. Consider the following:

- Site accessibility; because gardens should be visited regularly
- Access to water
- Full sun
- Protection from the wind, if the garden is not near a building, situate your garden so there is a row of trees to the north and west
- Outside of a 'frost pocket' or low-lying area
- Ask permission to make sure the land can be used for a garden

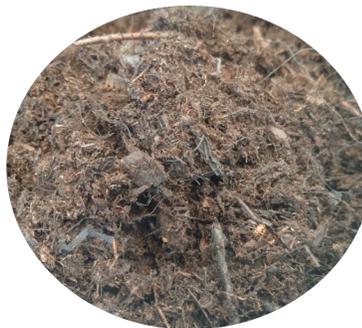
*Which area would you select to start your garden?*



### The soil

Soil should be:

- airy
- able to hold water, but also able to drain
- fertile
- pH (6-7.5)



When constructing your garden soil it is important to use local materials. Peat is a great example of a material that holds water and is porous (airy) and can be combined with a soil from the site, such as a silt or clay. However, peat does not often contain enough nutrients for garden vegetables and should be supplemented with other local materials to add fertility. For an example: The community garden in North Caribou Lake used fish compost and mineral fertilizers. At one point, Fort Albany used cattle manure as fertilizers.

To determine the pH of the soil, you can purchase a soil testing kit, pH meter or litmus paper strips. A soil pH that is too high or too low can limit the amount of nutrients that are available to plants. Ideally the soil pH should be from about 6 to 7.5. Some material may need be to added to either lower or raise the pH of your current soil.

### What are some local materials I can use to add nutrients to the soil?

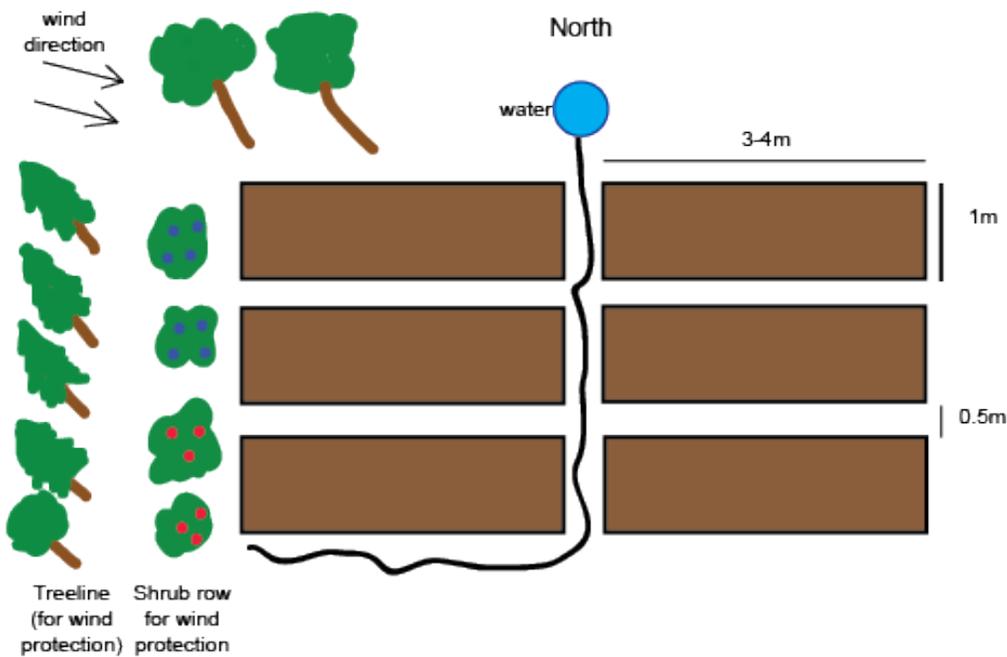
Some other examples include: compost, manure, peat moss, hunting waste, wood chips, ashes from burning wood.

## The architecture of the garden

### Garden beds

There are many interesting ways to build garden beds that are not only best for growing lots of plants, but can also maximize your resources, extend the garden season, and reduce garden maintenance time. Whichever way you choose to build your garden beds, raised beds are the way to go for gardening. They require a bit more material at first, but provide drainage, promote root development and can warm up more quickly in the spring, allowing you to start seedlings a bit sooner. Raised beds should be at least 30cm tall. When constructing the raised bed in is a good idea to lay out decomposable material such as cardboard at the bottom. This will kill the weeds underneath, but after a year or so, the roots from your vegetables will be able to grow and access the soil beneath the ground level.

Garden rows can run either north to south or west to east, but strategically place tall plants at the northern side of the garden, so they don't block other plants from the sun. Raised beds can be contained walls or not. The width of your garden rows should be no more than twice the length of a persons reach, approximately 1m is ideal. Walk ways should be wide enough to allow for a person to walk comfortably with some equipment, about 0.5m.



Fencing is optional, but is useful to keep out animals and deter people from interfering with your garden. Fencing can be constructed from affordable materials such as locally sourced posts and chicken wire, or they can be more costly if the lumber is purchased. Some fences can be constructed for free, but will require a great deal of time and effort. Other garden features may include trellises, archways, stakes for taller heavy plants such as tomatoes.

## What costs can I expect?

Before you start your garden, consider there will be some start-up costs. But the amount you spend will depend on your design and how much equipment you purchase. You can expect to spend between \$200- \$3000 for your first garden. If you are starting a community garden project, there are many opportunities for extra funds to help. Community garden start-ups will require more equipment and are usually larger so you should expect to spend \$500-\$15000+. This will depend on whether a greenhouse is purchased, the material used for fencing, how complicated the watering (irrigation) system is, etc. Here is a look at a sample garden budget.

Equipment and material	Quantity	Cost per unit	Start-up Cost	Annual Cost	Notes
<b>Tools</b>					
Shovels	3	\$30	\$90		
Hand spades	6	\$10	\$60		
Rake	1	\$35	\$35		
Pitch Fork	1	\$25	\$25		
Wheelbarrow	1	\$100	\$100		
Plastic sheets (vapour barrier, clear garbage bags, etc.)	25m <sup>2</sup>	0	-		(use plastics from packing materials, ask local industry)
Frost protection sheets	1 for each bed	0	-		(use old bed sheets/ tarps)
Miscellaneous (twine, pruners, gloves, labels, pots, etc.)			\$60	\$20	
<b>Seeds</b>					
Vegetable seeds	15 pkgs	\$2-5	\$15-75	\$30*	*Learn about seed saving to reduce annual costs
<b>Irrigation materials</b>					
Water hose (100ft min)	1	\$40	\$40		
Water nozzle fixture	1	\$15	\$15		
<b>Total Costs</b>			\$500	\$50	
<b>Optional costs for consideration</b>					
Fencing	*		\$200-5000		*Dependant on size of garden area, and type of fencing material purchased
Green house			\$300-20000*		*Dependant on size of greenhouse, construction materials used, labour to construct, etc
<b>Garden coordinator</b>				\$2000-15000*	*Dependant on roles and involvement in project and solid volunteer base is a requirement in community gardens

# The What? When? and How? of garden planting

## What to grow?

Choosing what to grow if you have never gardened can be a bit overwhelming at first, but is also very exciting. A few things to consider when deciding which seeds to purchase.

### 1. Plant what you will actually eat!

Don't plant 20 feet of kale, if you just enjoy the occasional kale smoothie. Don't be afraid to try new things, but make sure you focus on what you know you will eat and enjoy so you stay excited about gardening. I try to pick one new vegetable or fruit every year to try growing every year.

### 2. Plant what will grow!

Select plants that are **cold hardy** or able to grow within your growing season. Sometimes certain vegetables have varieties that are cold hardy or grow more quickly, consider selecting these varieties. I have spent a lot of energy trying to get a watermelon, without any luck. Check out your plant hardiness zone: [http://planthardiness.gc.ca/ph\\_main.pl?m=1](http://planthardiness.gc.ca/ph_main.pl?m=1) and the planting dates in Ontario at: <http://www.omafra.gov.on.ca/english/crops/facts/climzoneveg.htm>. The date of last frost ranges from May 15th to the end of June, depending on your location. Generally speaking, If a plant requires more than 120 days to reach maturity, it will require more effort to grow in a northern Ontario climate. For instance, peppers and tomatoes may need to be started several months early, indoors and under lights, in order to produce fruit in time before the fall frost. This information can be found on a seed package. We have included a planting guide below and have more information on reading a seed package on the next page.

### 3. Plant what costs a lot to buy in your community!

Every year, I focus on growing a lot of lettuce, it is easy to grow and saves us money during the growing season. I don't grow onions or potatoes anymore because they are inexpensive in our town to purchase and we have a local supplier. However, this will differ for your community, especially if you are in a remote area.

## When to grow?

Garden calendars are a great tool to start you off to know when and what to plant. Its a good idea to also keep your own records and create your own calendar for your area.

There are often guidelines on the back of seed packages, that will describe how long a plant takes to reach maturity and when it should be planted.

### GARDEN PLANTING CALENDARS

For zone 3 (Alberta): <http://www.salisburygreenhouse.com/your-seeding-calendar/>

Zone 2b, Lake Superior, Ontario): <https://mybackyard.ca/planting-date-guide-simplified/>

Ontario planting calendars (few northern towns included, pick a major city nearest you for a guide): <https://www.almanac.com/gardening/planting-calendar/ON>

For West coast seeds (many climate zones): <https://www.westcoastseeds.com/garden-resources/west-coast-seeds-planting-charts/>

### SEED SUPPLIERS

Local grocery and hardware stores often carry vegetable seeds in the spring

West coast seeds: <https://www.westcoastseeds.com/>

Veseys seeds: <https://www.veseys.com/>

Stokes seeds: <https://www.stokeseeds.com/>

OSC seeds: <https://www.oscseeds.com/>

Seeds of diversity: <https://seeds.ca/diversity/seed-catalogue-index> (membership fees)

A more complete list of seed suppliers can be found at:

<http://www.omafra.gov.on.ca/english/crops/resource/vegseed.htm>



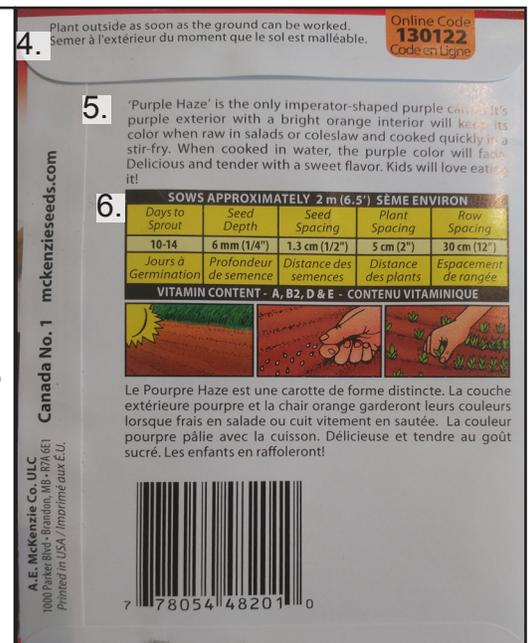
Where to plant	When to plant	Cold hardy?	Vegetable type
Directly into garden	Just before date of last frost	Yes	dill, beets, carrots, leaf lettuce, onion bulbs, peas (soak first), potatoes (with 'eyes'), radishes, swiss chard, turnips
Directly into garden	After date of last frost	No	beans, corn, cilantro
In pots indoors (4-8 weeks before date of last frost)	Transplant after date of last frost	Yes	broccoli, cabbage, cauliflower, kale, celery, onions from seed, parsley, romaine lettuce
In pots indoors (4-8 weeks before date of last frost)	Transplant after date of last frost	No	cucumbers, peppers, pumpkins, squash, tomatoes, zucchini, basil
Depends	Depends	Yes, usually	Perennials: chives, horse radish*, rhubarb, mint*, strawberries*, asparagus  Woody perennials: blueberries, currants, gooseberries, Saskatoon berries, raspberries*, haskap berry

\*These species can become 'weedy', plant in a garden corner away from other plots.



### Following a seed package:

1. Price
2. Variety
3. Days for plant to reach maturity (from when the seed is planted outside, or starting when the plant is transplanted). For example, tomatoes are planted almost 2 months before transplanting outdoors. Use this as a guide to select varieties that have shorter days to maturity.
4. When to plant the seed indoors (relative to the date of last frost for your region).
5. Details about the plant variety.
6. Planting parameters: How many days for the seed to sprout, depth to plant seed, how far apart to plant seeds, how far apart to place plants, how far apart plants between rows.



### Extending the growing season

Hoop houses, cold frames, greenhouses, and covering plants with sheets during frost are all ways of extending the growing season. Greenhouses or cold frames can be constructed for a couple hundred dollars. They allow the soil to warm up more quickly in the spring, allowing seeds from cold hardy species to be started a couple weeks early and protect plants from mild frosts. Yields and germination rates can also be improved in a greenhouse or coldframe.

If greenhouses are not an option, sheets should always be on hand to cover crops on frost nights (weather forecasts below 3°C should be considered a frost risk).



## How to grow?

Seeds come in all shapes and sizes, but there are a few conditions that all vegetable seeds require in order to grow. Again follow the instructions on the seed package for the depth to plant the seed and the distance between seeds for planting. Some seeds need to be planted indoors several weeks before the weather is favourable. For these plants, small pots about the size of a Solo cup are ideal. Plant 2-3 seeds per pot, but only allow one to continue to grow, by plucking out any others.

## GARDEN LAYOUT IDEAS AND CONCEPTS

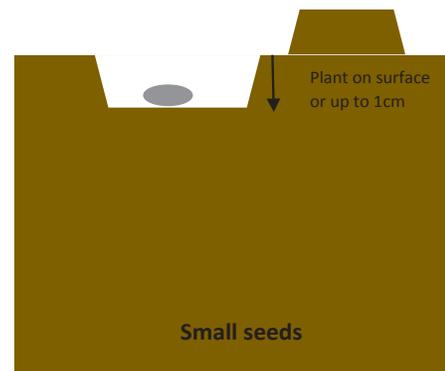
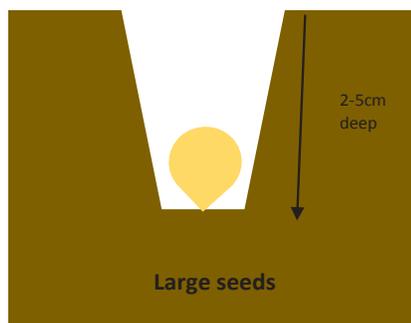
squarefoot gardening  
hugelkultur  
companion planting  
succession planting  
garden crop rotation

## Planting seeds

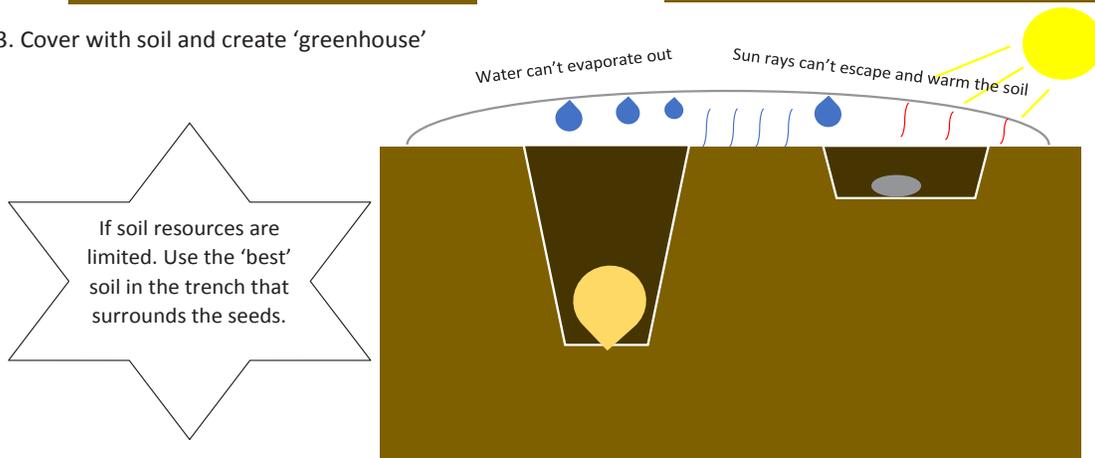
Seeds require water, some warmth, and most often light. Soil should be kept moist but not drenched. Water the soil before planting so the seeds stay in place. Dig a row to the correct depth (based on seed package recommendation). If the soil is very heavy, consider digging the trench a bit deeper and adding some of the 'best soil'. This might help the seedling to get started. Sometimes it is difficult to maintain conditions for seeds to germinate (sprout), especially if it is a dry or cool spring. To help our seeds get started, try to create a little greenhouse over the rows where you have planted the seeds. This can be accomplished by cutting open a clear garbage bag and placing rocks around the outside edges. This will warm the soil more quickly and reduce the amount of water that can evaporate from the soil. After your seeds have sprouted or once you have transplanted your seedlings to the garden. Mulch around them to keep moisture in the soil and reduce weed growth.

1. Water soil

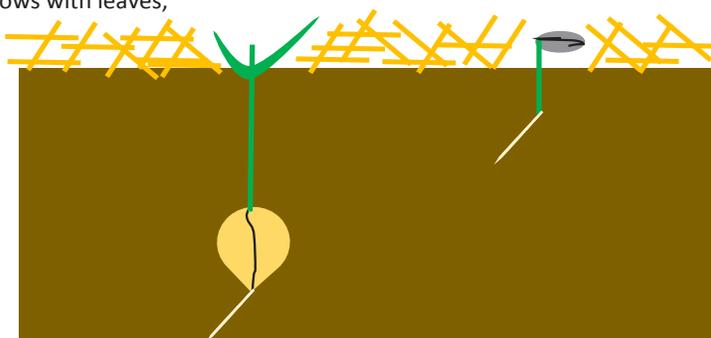
2. Then plant to proper depth



3. Cover with soil and create 'greenhouse'



4. Remove plastic once seeds have sprouted. Water!  
Mulch around plants and between rows with leaves, straw, or wood chips.



## Growing potatoes

Potatoes that start to grow 'eyes' are called seed potatoes and can be planted to grow more potatoes. Large potatoes can be cut into pieces as long as there is 1-2 eyes left per piece. Plant seed potatoes at a depth of 20-50cm (or as shallow as 5cm in very heavy soil, such as clay). Potatoes prefer well-drained soils. Space seed potatoes 30-60cm apart.



## Composting

Composting is essential for any garden. It is made from decomposed materials such as kitchen scraps, dried leaves, and parts of the plants that are not used in the fall. Over time this material turns into a compost soil that is rich in nutrients and can be added back to the garden. Some concern maybe that animals will get into the compost and be attracted to the garden area. By composting properly, this risk can be minimized. Composting can be as simple as piling all the materials up in a corner of the garden and layering kitchen scraps with dry leaves, or it can be more elaborate. Some people purchase tumbling composters. There are plenty of resources available online, more information can be found there.



## Harvesting and preserving

The best part of gardening is enjoying your harvests! For fast growing crops like lettuce and carrots, they can be harvested throughout the season and replanted to have a continual supply. Harvesting in the fall is the busiest time. Save time to harvest, clean the garden beds and stock the compost pile, and preserve some of your harvests. Many vegetables can be kept in a cold cellar that is cool, dark, and has moderate humidity. Other options to preserve vegetables includes: freezing, canning, dehydrating, and fermenting.



## First Nation communities in northern Ontario with community gardens

Eabametoong: <http://eabametoong.firstnation.ca/community/groups-and-projects/community-garden-project/>

Moose Cree: <http://www.moosecree.com/events/communitygarden.html>

North Caribou Lake: <http://www.theborealproject.org/pilot-project/>

Wahgoshig First Nation: <http://nada.ca/wp-content/uploads/2016/pdfs/Food%20Security%20&%20Nutrition/>

Wahgoshig-First-Nation-Community-Garden-Photo-Journal.pdf

## USEFUL LINKS AND RESOURCES

Basic gardening manual for Northern Manitoba: <https://www.gov.mb.ca/inr/pdf/pubs/mafri-gmnm.pdf>

Community garden guide: [https://www.nrcs.usda.gov/Internet/FSE\\_PLANTMATERIALS/publications/mipmcot9407.pdf](https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/mipmcot9407.pdf)

Community garden toolkit: <http://www.nbfoodsecurity.ca/wp-content/uploads/2016/08/Community-Garden-Toolkit.pdf>

<https://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-community-gardens-handbook.pdf>

## BOOKS

Northern gardener

The year round vegetable gardener