

SUMMARY

The Crop Care Knowledge Area for the Grow Calgary Farm Manager Certification Program includes the following tasks:

1	Planting Seeds and Lasagne Beds
2	Early Germination
3	Crop Selection
4	Seed Storage
5	Companion Planting
6	Sunlight
7	Watering Techniques
8	Weeding
9	Pest and Predator Management
10	Plant Diseases and Prevention
11	Crop Rotation
12	Harvesting
13	Appendix



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1 PURPOSE

This document outlines the Crop Care Knowledge Area for the Grow Calgary Farm Manager Certification Program. This section of the program has been developed to understand the interactions among soil, nutrients, plants and the environment, while providing an overview of sustainable crop management and site-specific controls.

Direct sowing is the method of planting the seeds directly into outdoor garden soil. This eliminates the need to transplant (and the related risk of transplant shock) or harden off plants. However, plants that have a longer growing season, like tomatoes, peppers, and eggplants will not do well when direct-sown.

2 LEARNING OUTCOME NO. 1: PLANTING SEEDS AND LASAGNE BEDS

Each plant has its own preferences for soil type, planting time, sun and water requirements, and care. Most plants grow best in a loamy soil made up of sand, clay, and silt. If the soil is very dense (clayey) or very porous (sandy), adding compost is ideal. Other amendments may be needed if the soil's pH level is too acidic or alkaline.

2.1 What and Where to Plant

- Crops need at least 6 hours of sunlight a day. Planting near structures or trees can protect from severe weather.
- Pick seeds that will thrive depending on season length, soil temperature, and climate.



- Start by laying wet cardboard on grassy areas to prevent grass overgrowth in your beds
- Wet cardboard facilitates decomposition and allows earthworms to eat and break down cardboard
- If there is limited grass growth, pull weeds and continue as below
- Add a layer of compost for a good source of nutrients. Compost can be made up of food, manure, straw, wood chips, mulch, and old plants
- Add a layer of topsoil. Use wood chips or organic materials as pathways between the beds

2.3 Planting Seeds

- Space seeds a few cm apart important so plants don't compete for sunlight and nutrients
- Depth don't plant seeds too deep or they won't come up or might not be as strong when they do
- Typically, beds will have a variety of seeds refer to appendix for companion planting
- Due to our short growing season and variety of plants, seeds will be started at different times refer to appendix for seed charts

Tools and Materials Required:

- Prepared lasagne beds
- Seeds for planting
- Rake/shovel
- Watering can or hose
- Plant markers



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Start with loose, weed-free soil. Loosen the soil lightly with your hands or rake if needed. The soil at Grow Calgary is rich in nutrients due to our no-till, no pesticide method, and compost. **Plant the Seeds:** Follow seed packet instructions for depth and spacing. With very tiny seeds, pinch the seeds between the thumb and forefinger and sprinkle into the soil. Larger seeds usually need to be buried, sometimes individually and sometimes in small clusters.

- Spacing larger seeds, such as peas and beans, will need more space between each seed
- Depth use the end of the shovel handle or your finger to make holes at regular intervals
- Label when a bed is all planted, mark it with a garden sign

Moisten the Soil: After planting the seeds, keep the soil evenly moist. It is best to use a shower or rose head watering can or a light spray setting on the hose.

Recognize the Seedlings: It's often hard to tell a weed from a seedling. Refer to images of what certain seedlings look like. They may need to be thinned to maintain spacing for growing, especially tiny seeds, like carrots or celery. If they grow too close, they won't mature.

Care for the Seedlings: Daily or twice daily watering in hot weather, and weeding can help the seedlings thrive. Water to keep soil damp, not soaking. Refer to water conservation methods.

3 LEARNING OUTCOME NO. 2: EARLY GERMINATION

Starting seeds indoors (in trays or cups) gives them a head start on the growing season and a stable, controlled environment to grow in. For most, seeds should be started indoors about 6-8 weeks before the last frost. This gives the plants time to grow healthy enough to survive transplanting. Not all seeds should be started indoors. Consult the seed charts in the appendix.

How to Start Seeds Indoors:

Choose a Container with Drainage Holes: Drainage prevents soil from becoming waterlogged, so it is better if the container has holes. Shallow trays with no drainage holes work too but soil moisture should be monitored closely.

Add Seed Starting Mix/Soil to Container: Seed starting mix made of peat moss, perlite, vermiculite, and compost is best. It provides drainage and makes it easy for sprouts to surface. Fill containers within a quarter-inch of the top and lightly compress it so it's flat on top.

Plant Seeds: Reference your seed packet for instructions on planting depth and spacing. Cover lightly with soil. Water until the soil is moist.

Cover Container: Cover seeds with a plastic dome to lock in moisture and heat necessary for germination. Store the seeds in a warm location with sunlight and rotate regularly so they get even sun exposure.

Water Seeds: Every day or so, check to see if the soil is still moist. Water as necessary. Containers can be uncovered once seeds germinate. The germination time varies.

Harden-off Seedlings: Gradually expose seedlings to the outdoors to prevent transplant shock. Start about 10 to 14 days before transplanting. Place the seedlings outside protected from wind and sun. Extend the seedlings' time spent outside and expose them to more and more sunlight.

Transplant Seedlings: After the last frost of the season (after May long-weekend) and once the seedlings have adjusted to the outdoors, transplant them outside. Gently pull roots apart and place into the beds, water. Refer to the appendix for transplanting tips.

4 LEARNING OUTCOME NO. 3: CROP SELECTION

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Calgary is in a zone 3 climate zone, so there are limited vegetables that thrive here. The main types of vegetables that are grown on the farm are outlined in the following section:





Lettuce seeds are tiny and can be sown directly. Buttercrunch lettuce grows quickly and can be harvested early. Romain takes longer to grow to maturity, but as with all lettuce, you can harvest leaves from the outside as it matures. Try to sprinkle seeds lightly.





4.1.2 Peas

Peas germinate quickly and grow well in cool climates. Pea seeds are large and easy to plant. Plant in the mounds to avoid needing to use stakes or a trellis for vine growth.

4.1.3 Radishes

Radishes grow rapidly, most can be harvested 25 to 30 days after being planted. Radishes grow well in cool climates and can be planted as soon as the soil is workable. Plant with carrots to help space the carrots. Radishes can be sown every two weeks in Spring.

4.1.4 Carrots

Don't start seeds indoors as transplanting would interrupt root development. Carrot seeds are tiny, choose a day with no wind to plant. Sprinkle lightly. Keep carrots weeded well for best growth.



4.1.5 Beans

Beans germinate and grow rapidly with very little maintenance. Bean seeds are large and easy to plant. Beans grow best when soil is warm. Avoid watering with cold water.



4.1.6 Spinach

Spinach grows well in cool weather and is prone to bolting. Plant early in the spring. Seed every 2 to 3 weeks for a continuous supply. Plant on the north side of a taller plant to provide shade.



4.1.7 Beets

Beets grow quickly and easily with little maintenance. Beet tops can be cooked and eaten, or given to the animals as a treat.



4.1.8 Potatoes

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Potatoes are easy to grow, requiring little maintenance. We generally plant potatoes in the mounds so they can grow in deep soil. Once the plant has matured, lightly dig around the plant roots to harvest the potatoes.



4.1.9 Kale

Kale grows easily and can be harvested multiple times from the same plant. Only take 1/3 of the leaves when harvesting. Kale is hearty and can survive frosts and cooler weather in the fall for a longer harvest.



4.1.10 Zucchini

Zucchini is the easiest of the squash family to grow in cool climates. Zucchini seeds may be started indoors or planted directly. Plant in a warm, full sun location.

We also grow a variety of leafy greens like chard, gai lan, pac choi, and cabbage. As well as tomatoes, pumpkins, various squash types, and sunflowers to promote pollinators in the area.

5 LEARNING OUTCOME NO. 4: SEED STORAGE

Seeds are best stored in cool, dry, dark places to extend shelf life. Most seeds are good for at least 1-2 years past their packaged date. Some can even last up to 5 or 6 years. Consult the seed chart at the farm and in the appendix. We store our seeds in the orange seed trailer that says "Grow Calgary".

It is important to keep seed buckets covered and on the wire shelves to reduce the possibility of rodents entering the seed trailer. Ensure doors are closed tightly to the seed trailer. Seeds are sorted by category family (ie brassica, umbellifers), then produce type (ie carrot, beet). Most packets with date ranges of 1 to 2 years are bundled together. Older seeds will have lower germination rates per package.



6 LEARNING OUTCOME NO. 5: COMPANION PLANTING

Companion planting refers to growing seeds and plants that compliment each other's growth in the same beds. This often prevents pests and diseases in the soil, increases soil nutrients, and increases yield. Common companion plants are tomatoes with herbs like basil, carrots with cucumbers and squash. See appendix for companion planting chart.

Photosynthesis:

1. The plant draws up water (H₂O) through its roots

2. The leaves take in CO, from the air

4. The plant uses the energy of sunlight to turn water (H_2O) and CO_2 into sugars and oxygen (O_2)

5. The plant releases oxygen (O₂) into the air

6. The plant uses the sugars for growth

3. The leaves trap energy from sunlight

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7 LEARNING OUTCOME NO. 6: SUNLIGHT

Sunlight provides plants with energy to grow and produce. Through photosynthesis, plants absorb light from the sun, CO2, and water and convert it into sugars. Too much sun can dry out the soil, burn the leaves, or cause some plants to bolt too quickly. Tips on what to do in extreme heat are outlined in the Agroecology Knowledge section.

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8 LEARNING OUTCOME NO. 7: WATERING TECHNIQUES

Watering is an important resource for plant growth and health. Moist soil is especially needed during the germination process and for newly transplanted seedlings. Mulching is our number one water conservation technique.

8.1 Watering Process

- Use the irrigation system to water the crops
- Fill water tanks from the pipe and water with the hose if required
- Water seedling trays, beds, and mounds with watering cans

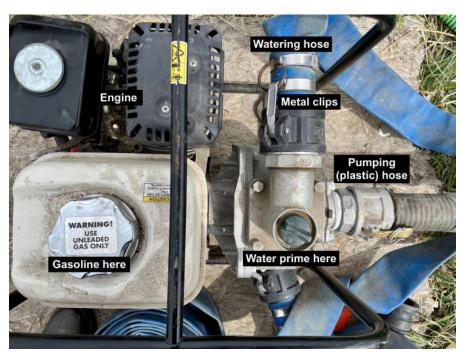
8.2 How to Use the Irrigation System:



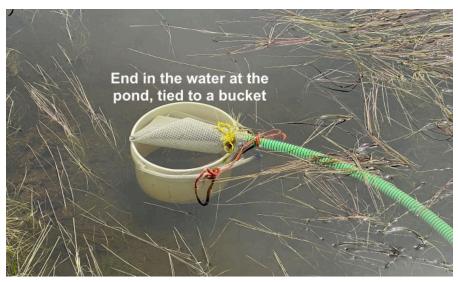
- Place the pump on a flat even surface, a piece of plywood on grass works great
- We have a 1 inch pump and a 2 inch pump, green plastic hose is for the 1 inch and grey plastic hose is for the 2 inch

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- Open the gas top and make sure it is filled (NO diesel, regular gas only)
- Open the water top and fill it (called "priming") use a watering can to fill
- Secure the plastic (green or grey) hose to the pump by flipping metal snaps down



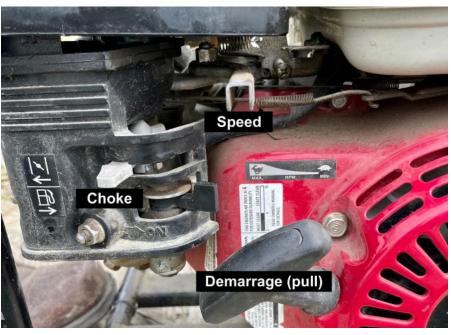
• At the pond, make sure the other end of the plastic hose is netted (to reduce dirt in the hose/pump) and tied to a bucket with rocks in it and the bucket is submerged. At the well, submerge the plastic hose in the well



• Attach the 1 inch or 2 inch blue hose to the other end of the pump, secure by flipping both metal snaps down. Make it longer by attaching more hoses together, flip metal snaps



• Turn the pump on



- Start with the choke to the right
- Pull the demarrage multiple times, hard until the engine starts
- Once running, move the choke towards the left and keep speed mid-high
- If the pump does not work or stops working, set the pump aside in the tool trailer and notify Farm Manager Coordinator

9 LEARNING OUTCOME NO. 8: WEEDING

Weeding is important for plant growth as invasive weeds can over take plants, stunting their growth or killing them before they reach maturity. At Grow Calgary, we utilize multiple techniques to reduce weeds in the beds:

 Making lasagne beds keeps grass and weeds under the cardboard. Once the cardboard has composted, the weeds and grass will as well, adding more nutrients to the soil



- Laying wood chips on pathways between the beds. Similar to the cardboard, the wood chips keep grass and weeds covered and prevent them from growing further into the beds
- Mulching the beds around our plants keeps the rest of the soil covered, reducing the ability for weeds to grow through
- Pulling thistle and weeds. We resort to pulling weeds when they are growing in the beds. Manually with a shovel and gloves so we do not disturb the other plants that are growing

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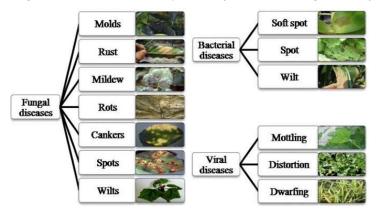
10 LEARNING OUTCOME NO. 9: PEST AND PREDATOR MANAGEMENT

Animals like birds, squirrels, certain insects, and rodents can all be damaging to plants in the garden beds. We may also have predators like coyotes, hawks, and eagles around the farm as well. To mitigate visits from these animals, we employ a few techniques:

- Companion planting keeps bugs away as plants can deter each other's pests
- Growing fragrant and pungent flowers like marigolds

11 LEARNING OUTCOME NO. 10: PLANT DISEASES AND MANAGEMENT

Plant diseases are harmful, they stunt growth, spread to other plants, and beds, and can cause long term damage to the soil. This is why it is important to mitigate and prevent diseases.



- Compost keeps disease away by adding natural compounds to the soil and generating heat
- Watering in the morning or earlier in the day means leaves will be dry in time for cooler nighttime temperatures. Moisture and cold increase the possibility of disease
- Keeping roots moist, not leaves. Mulching and watering close to the roots reduces the likelihood of disease from wet leaves and stems
- Thinning and pruning dead plants and leaves, as well as weeding promotes good airflow between plants, and eliminates a living area for pests
- Know what to look for and pinch off any infected leaves or stems right away

12 LEARNING OUTCOME NO. 11: CROP ROTATION



Crop rotation is another way to prevent pests and plant diseases. It refers to the process of rotating where the crops are planted to ensure the beds are growing different items each season. At Grow Calgary, we take photos and identify beds with signage to remember what crops were planted where.

Crop rotation also allows us to alternate which beds are used for deeper rooted plants such as carrots and beets, and shallower plants like leafy greens. Beds that previously had deeper

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rooted plants are re-made with cardboard and therefore become a bed for shallower plants.

13 LEARNING OUTCOME NO. 12: HARVESTING

Harvesting the produce is one of the most rewarding parts of volunteering at Grow Calgary. After lots of work to prepare the beds and plant all the seeds and transplants, we get to see the literal "fruits" of our labour. We have provided food to 40+ local food access programs. When harvesting, it is important to remember that some plants can be continually harvested over several weeks, while others cannot. Refer to the seed chart for more information. Most plants will continue to produce if picked often enough. Never pull a plant out (with the exception of potatoes), and ensure that you are harvesting from the outside-in to keep the plant healthy. Brush off as much dirt as possible off the produce before setting aside for donation.

Food deliveries and pickups will be pre-scheduled with food access programs. Refer to the schedule in the Info Trailer and contact the organization if required. Unless otherwise noted, a variety of produce can be given, aiming for 3-5 buckets per delivery/pick-up. Buckets can be returned to the farm if possible. Be sure to keep track of bucket amounts and take photos!



APPENDIX:

Seed Chart

Seed Type	Seed Life	Starting	When to Plant in Beds	Germination	Harvest In	Growing Conditions	Appearance Notes	Special Notes
Amaranth	5 years	direct	late spring	4-10 days	40-50 days	warm, full sun	pink/red flowers	seeds can be collected
Asparagus	3 years	transplant	start in winter	2-8 weeks	3 years	cool, full sun		use bright lights
Arugula	6 years	direct, transplant	mid spring	4-8 days	21-30 days	cool, partial shade		cut & come again crop
Basil	5 years	transplant	mid spring	5-10 days	21-30 days	warm, full sun		tear leaves, do not cut
Bean (bush)	3 years	direct, transplant	early summer	8-16 days	40-50 days	warm, full sun		climbs, pick regularly
Bean (pole)	3 years	direct, transplant	early summer	8-16 days	40-50 days	warm, full sun		climbs, pick regularly
Bean (runner)	3 years	direct, transplant	early summer	8-16 days	40-50 days	warm, full sun	scarlet flowers	climbs, pick regularly
Bean (soy)	3 years	direct, transplant	early summer	8-16 days	40-50 days	warm, full sun		pick pods in middle
Beet	5 years	direct	early summer	5-12 days	50-60 days	full sun, partial shade		can eat whole plant
Bergamot	4 years	direct, transplant	early spring	10-14 days	21-30 days	warm, full sun	pink/purple flowers	
Bok Choi	5 years	direct, transplant	early spring	5-10 days	30-50 days	partial shade, full sun		
Broccoli	5 years	transplant	mid spring	7-10 days	60-90 days	cool, full sun		transplant w/ ~6 leaves
Brussel sprout	4 years	direct, transplant	early spring	7-10 days	45-60 days	cool, full sun		transplant w/ ~6 leaves
Cabbage	5 years	transplant	early summer	7-10 days	60-80 days	cool, full sun		
Cantoloupe	5 years	transplant	early summer	5-10 days	60-80 days	warm, full sun		transplant at 5wks old
Carrot	6 years	direct	early spring	14-21 days	40-70 days	cool, full sun		sow shallow, water lots
Catnip	3 years	transplant	early summer	10-20 days	80-90 days	warm, full sun	pink & white flowers	pick regularly
Cauliflower	5 years	transplant	mid spring	7-10 days	60-90 days	cool, full sun		transplant at 5wks old
Celeriac	5 years	transplant	early summer	20-30 days	40-60 days	cool, full sun		grow 3 seeds/cup
Celery	5 years	transplant	early summer	20-30 days	40-60 days	cool, full sun		grow 3 seeds/cup
Chamomile	4 years	direct, transplant	late spring	10-14 days	70 days	warm, full sun	white yellow flowers	
Chard	5 years	direct	late spring	7-14 days	50-60 days	cool, full sun	-	
Chives	2 vears	direct transplant	late snring	7-14 days	- eveh 09-08	cool full sun		
Cilantro	2 year	direct	late spring	5-10 days	40-50 days	full sun, partial shade		avoid too much sun
Collard	4 years	direct, transplant	early spring	7-10 days	60-80 days	cool, full sun		cut & come again crop
Corn	3 years	direct, transplant	late spring	7-10 days	70 days	warm, full sun		
Corn Salad	5 years	direct, transplant	late spring	7-21 days	50 days	full sun, partial shade		cool, moist soil
Cress	5 years	direct, transplant	early spring	7-9 days	20-50 days	full sun, partial shade		keep very moist
Cucumber	5 years	transplant	early summer	3-10 days	50-70 days	warm, full sun	pick regularly	transplant w/ ~3 leaves
Dill	5 years	direct	late spring	10-21 days	60-80 days	warm, full sun		
Eggplant	5 years	transplant	late spring	7-12 days	55-80 days	warm, full sun		use cups not trays
Endive	6 years	direct, transplant	mid spring	2-5 days	70-80 days	cool, full sun		cut & come again crop
Fennel	3 years	direct	mid spring	7-14 days	50-80 days	warm, full sun		
Gai Lan	5 years	direct	early spring	7-10 days	50-60 days	cool, full sun		harvest before flowers
Garlic	N/A	direct	september	N/A	6 months	cool, full sun		
Kale	5 years	direct, transplant	early spring	7-10 days	60-80 days	cool, full sun		cut & come again crop
Kohlrabi	5 years	direct	early spring	7-10 days	50-70 days	cool, full sun		frost hardy
Lavendar	4 years	transplant	early summer	14-21 days	60-80 days	warm, full sun		need bottom heat
Lemon balm	4 years	transplant	late spring	10-14 days	50-70 days	sun, partial shade		barely cover seeds
Lettuce	6 years	direct, transplant	early spring	7-15 days	40-55 days	sun, partial shade		
Lovage	3 years	transplant	late spring	10-14 days	50-60 days	sun, partial shade		grow 3-4 seeds/cup
Marjoram	4 years	transplant	late spring	7-14 days	50-60 days	warm, full sun		
Mesculin	5 years	direct	early spring	7-10 days	40-55 days	sun, partial shade		
Mint	4 years	direct, transplant	late spring	10-16 days	50-60 days	sun, partial shade		
Mustard	5 years	direct	early spring	5-10 days	40-55 days	cool, full sun		
Onion	1 year	transplant	mid spring	6-12 days	80-90 days	cool, full sun		Stop watering in Aug
Oregano	4 years	transplant	late spring	7-14 days	50-60 days	warm, full sun		
Parsley	2 year	transplant	late spring	10-21 days	80 days	sun, partial shade		plant deep in soil
Parsnip	3 year	direct	mid spring	14-21 days	40-70 days	cool, full sun	best after frost	leaves can cause rash
Pea	3 years	direct	mid spring	7-14 days	50-60 days	cool, full sun		climbs, pick regularly
Pepper (hot)	4 years	transplant	early summer	10-21 days	60-80 days	warm, full sun	changes colour	transfer to small pots
Potato	N/A	direct	late spring	N/A	60-90 days	warm, full sun	cover with ++soil	plant 6" deep
Pumpkin	4 years	direct, transplant	late spring	7-14 days	70-100 day	warm, full sun		
Purslane	5 years	direct	early spring	7-10 days	60 days	sun, partial shade		
Quinoa	3 years	direct	late spring	4-10 days	80-90 days	warm, full sun	flower clusters	dry seeds

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Radish	6 years	direct	mid spring	5-7 days	24-30 days	cool, full sun		replant through seasor
Raspberry	N/A	direct, transplant	mid spring	11-21 days	2 years	warm, full sun		dies after 2 yrs
Rhubarb	2 years	direct, transplant	late spring	5-10 days	1 year	cool, full sun		
Rosemary	4 years	transplant	early summer	15-28 days	1 year	warm, full sun		low germination rate
Rutabagas	5 years	direct	late spring	7-15 days	90 days	cool, full sun		
Sage	4 years	transplant	mid spring	2-3 weeks	60 days	warm, full sun		cut back after flowering
Scallion	1 year	direct, transplant	mid spring	6-12 days	65 days	cool, full sun		
Sorrel	2 years	direct	mid spring	7-10 days	60 days	sun, partial shade		
Spinach	3 year	direct	mid spring	7-14 days	55 days	sun, partial shade		
Sprout	5 years	direct	anytime	1-2 days	3-5 days	N/A		grow in mason jar
Squash	4 years	transplant	late spring	7-14 days	65-90 days	warm, full sun		
Strawberry	N/A	transplant	mid spring	4-6 weeks	150 days	warm, full sun	pick regularly	transplant w/ ~3 leaves
Sunflower	1 year	direct, transplant	late spring	10-14 days	60-70 days	warm, full sun		
Tarragon	4 years	direct, transplant	mid spring	4-14 days	50-60 days	sun, partial shade	yellow flowers	
Thyme	4 years	direct, transplant	mid spring	15-28 days	2 years	warm, partial shade		water to minimum
Tomato	5 years	transplant	late spring/early summer	7-14 days	50-70 days	warm, full sun		stop water end of July
Turnips	5 years	direct	mid spring	7-14 days	35-55 days	cool, full sun		
Watermelon	4 years	transplant	early summer	5-10 days	60-80 days	warm, full sun		transplant at 5wks old
Zucchini	4 years	transplant	late spring	7-14 days	50-60 days	warm, full sun		pick regularly

Calgary Horticultural Society Seed Chart

Seeding/Transplant	Plant	Days to	Seeds or	Suggested Varieties
Date		Harvest	Transplant	
April 25	Parsnips	120-130	Seed	Hollow Crown
April 25	Peas	60-75	Seed	Green Arrow, Little Marvel
April 25	Spinach	40-50	Seed	King of Denmark
April-July	Radish	20-30	Seed	Cherry Belle, French Breakfast
May 15	Potatoes	70-90	Seed	Norland, Yukon Gold
May 15	Lettuce	50-70	Seed	Baby Star, Red Sails
May 25	Squash	50-100	Seed	Spaghetti, Butternut
May 25	Turnip	55-60	Seed	Laurentian,Royal Crown
May 25	Beans	50-80	Seed	Tendergree, Painted Lady
May 25	Nasturtium	35-50	Transplant	Alaska, Jewel Mix
May 25	Corn	70-80	Transplant	Northern Extra Sweet
May 25	Broccoli	45-65	Transplant	Early Dividend, Green Goliath
May 25	Tomatoes	50-100	Transplant	Mamma Mia, Sungold
June 1	Carrots	70-80	Seed	Baby Spike, Little Fingers
June 1	Bell Peppers	60-70	Transplant	Fat N' Sassy, Banana
June 1	Cabbage	70-80	Transplant	Red Express, Golden Cross
June 1	Cucumber	55-65	Transplant	Straight 8

Transplanting Tips

When to start planting?	How to start seedlings?	Transplanting Tips
 Refer to "Seed Type & Growth" chart in seed trailer and binder Start seeds inside, ~1-2 months before transplanting Seed types to be planted into beds by early-mid Spring or those with long harvest times can be started in April into May Seed types that need warmer weather to thrive should be started in late Spring 	 Fill trays/cups half full with soil and sow seeds Lightly cover with soil Water and put somewhere sunny Check soil moisture every couple days and water if dry Grow indoors until at least May Can be outside protected from wind and covered with domes 	 Select seedlings that have at least 3 true leaves Make sure they get ample sun, water and mulching once transplanted into beds Transplanting is a big change for seedlings, it's a new environment If weather is not optimal (too hot/dry, cold), hold off If seedling roots are stuck together, gently pull apart to transplant 1 seedling at a time

Companion planting

DOs	DON'Ts
Basil and tomato, pepper, oregano	Bean and beet, chive, onion, garlic
Bean and brassica, carrot, cucumber, pea, potato, eggplant, chard, corn, radish, celery	Brassica and eggplant, pepper, potato, tomato, strawberry
Beet and brassica, corn, garlic, leek, mint, lettuce	Melons and potato
Chamomile and onions	Carrots and dill, parsnip and potato
Chard and bean, brassica and onion	Cucumber and sage, potato
Chive and carrot, tomato	Dill and tomatoes
Chamomile and onions	Fennel and any vegetable or fruit
Corn and soybean	Onions and peas
Radish and lettuce, mint, parsnip, pea, spinach, squash, tomato	Parsley and mint
Sage and cucumber	Radish and potato