

Seed Starting and Planting Guide

Explanation of Calgary & Area Growing Season What we can grow in our environment is largely based on the length of the growing season and coldest temperature.

- The growing season is determined by the average frost dates; it begins after the last frost (in spring) and the ends before the first frost (in autumn).
 - Last frost is the last time it is cold enough for the dew to freeze (which can damage or kill plants).
 - First frost is the first time it is cold enough for the dew to freeze. Most plants must be harvested prior to the first frost.
- The coldest temperature your area reaches determines the "Plant Hardiness Zones." Hardiness zones determine the types of plants that can grow in a specific area, and more specifically the types of plants that will survive the coldest winter temperatures and continue to grow the next season.

Calgary and surrounding areas generally range from Zone 2B to 4A. Our growing season is generally about 114 days (May 23-Sept. 15) and is noted on the following chart by an orange line.*

*Tip! These are just guidelines based on year over year averages. Make sure to always check the weather and forecast to determine when you should plant.

What does frost hardy mean?

Though most vegetables are damaged by frost, some vegetables are better at withstanding frost and can have a longer growing season.

Why should you start seeds indoors? ■ ■ Starting your seeds indoors has multiple benefits:

- 1. You get to garden earlier and for longer!
- 2. It increases the length of the growing season, bringing the time to harvest or flower (for most plants) within the growing season.
- 3. Some plants have a hard time growing from seed in our environment. Starting from seed indoors increases the chance of survival by increasing the plant's hardiness before it's exposed to the elements.

What is direct sow? ● ●

Direct sow is when you plant seeds directly in soil outdoors. Some plants are hardy and grow fast enough to be planted directly outdoors.

What is plant vs. plant and cover? $\langle vs. \rangle$ Seedlings started indoors should be planted outdoors around or after the frost. If planted close to the last frost, some newly planted seedlings should be covered with a frost blanket at night.

What is transplanting?

Transplanting is when you move a plant to a larger container while it continues to grow indoors. Some plants may need to be transplanted multiple times before it can be planted in its final location outdoors. Be careful when you plant seedlings, they're more delicate than larger plants.

What is repotting?

Ornamental container plants and houseplants live in their container for multiple years. Repotting is moving this ornamental or indoor plant from the container it has outgrown to a larger pot.

Why should you cover outdoor plants?

Nighttime temperatures can impact the growth of a plant, especially around the first and last frost of a year. Frost blankets or sheets can be used to cover seeds and plants to protect it from frost.

What does "days until harvest" mean?

Days until harvest is the time from planting to when you can begin harvesting. Harvesting is dependent on when you want to harvest and the weather; and it can vary between plant varieties.

- Ex. Harvest when ready: grown radishes
- Ex. Harvest for size: harvest a large vegetable because it may break. Or harvest some carrots when small and others later in the season when they're larger.
- Ex. Harvest continually: Some plants, like herbs and tomatoes, continue to grow and can be harvested throughout the season.

Harvest vs. maturity

Harvest time is when a plant or vegetable is ready to eat. Plant maturity is when the plant has reached its full potential, this primarily applies to perennial plants. Asparagus, for example, will not meet its full potential until multiple growing seasons have passed.

Annuals vs. biennial vs. perennials

Annual plants will not survive the winter and are replanted the following year. Biennial plants have a two-year life cycle; they grow one year, flower, self-seed and die the next. Seed additional flowers the next year to ensure flowers develop every year and the plants continue to self seed. Perennial plants can survive winter and regrow the following season. Whether a plant is an annual or perennial depends on the hardiness zone.





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 $\Diamond\Diamond\Diamond$ Plant



Direct Sow & Cover



Calgary & Area Growing Season

								Calga	ıry	& Area Gr	owing Sec	ason	<u> </u>			
	WINTER			SF	PRING				S	UMMER			F	ALL		
Bulb	JAN	FEB	MAR		APR	MAY		JUN		JUL	AUG	SEP		OCT	NOV	DEC
Garlic												• •				
Green Onions/Scallions	镁					•	•	• • •	•	• • • •	• • • •					
Leeks							\Diamond	• • •					1			
Onions, Storage & Sweet							\Diamond	\Diamond								
Onions, Overwinter	()									•	•					
Cruciferous			,								·					
Artichoke						1										
Arugula	Ŕ			Ц		• • •	Щ	• • •	_	• • •	••••	• • •,	•	•		
Broccoli	É			Ш			\Diamond	◊ • •	•							
Broccoli, Overwinter				Ц						• • • •						
Brussels sprouts	Ŕ .			Ц					\Diamond							
Cabbage	Ŕ			L!			\Diamond	◊ • •	•	• • • •						
Cabbage, Overwinter	Ŕ			Ц						• • • •						
Cauliflower				Ц			Ц	$\Diamond \Diamond$	•	• •						
Cauliflower, Overwinter				Ц				-			♦					
Collard Greens & Kale				Ш			\Diamond	◊ • •	•	• • • •						
Kohlrabi	Ŕ			Ш			\Diamond	\Diamond			•	• • •				
Radish				Ц			•	<u>•)•</u>	•	• •	•	• • •				
Rutabaga				Ц				• •	•	• •						
Turnips	()					•	•	• • •	•	•• • •	• • • •					
Edible Plant Stem																
Asparagus P\$	K							$\Diamond \Diamond \Diamond$								
Celery							◊	\Diamond								
Rhubarb (from root)	朱						•	• •	•	• • •	• • •	• •				





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Perennial Start Indoors Direct Sow

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Cover

Direct Sow & Cover



Calgary & Area Growing Season

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	V	VINTER			SPRING						SU	JMMER			FALL		
Fruit & Marrow	JAN	FEB	MAR		APR	MA	·Υ		JUN		JUL	AUG	SEP		ОСТ	NOV	DEC
Cucumber									\Diamond								
Eggplant					-				0								
Melons										\Diamond	\Diamond \Diamond						
Peppers							_			\Diamond				L			
Pumpkins							i			\Diamond				L			
Squash							<	\Diamond \Diamond						L			
Tomatoes							j		1	\Diamond							
Leafy Greens														<u> </u>			
Endive/Radicchio						•	•	• •	• •	•				L			
Lettuce						=	į	•	• •	•	• • • •	• • • •	• •/	10	•		
Spinach					6	•	•	•	• •	•			• •/	•	•		
Swiss Chard							•	•	•••	•	• • • •						
Legumes							<u> </u>							<u> </u>			
Beans, Bush & Pole								•	• •	•	•						
Broad Beans						• •	•	•					• • •	•			
Peas					• •	• •	• (•			• •						
Root & Tuber																	
Beets								•	• •	•	• •						
Carrots							•	•	• •	•	• • • •						
Parsnips							•	•	• •								
Potato								•	• •								
Turnips		• •	• • •	•	• • • •	• •	•	•									





Perennial

Start Indoors

Direct Sow

Plant Cover



Calgary & Area Growing Season

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		\	WINTER			S	İ				SI	JMMER		FALL				
Herb		JAN	FEB	MAR		APR	MAY	′		JUN		JUL	AUG	SEP		ост	NOV	DEC
Basil										• •								
Catgrass								•		• • •	•	• • • •	• • •					
Cutilip)							•	•	• • •	•							
Chives, Assorted	P ∰							\	> <	>								
Cilantro/Coriander								į	•	• •	•							
Dill, Assorted								•	•	• • •	•	• •						
Fennel								L	•	• •	•	• • •						
Lavender							• • •	ŀ		• •	\Diamond	$\Diamond \Diamond \Diamond$						
Lemon Balm	P							•		• • •								
Marjoram/Oregano, Assorted	業				-			\	> ◊	•								
Mint, Assorted	蝶							\ \	\)								
Parsley, Assorted	業																	
Rosemary						-		t			\Diamond	◊ ◊ ◊ ◊•	• • •					
Sage	***																	
Stevia								1	\	$\Diamond \Diamond \Diamond$								
Summer Savory								İ										
Tarragon	0							İ										
Thyme, Assorted	>																	

Herb starting tips!

- When starting herbs, especially basil, a heat mat and humidity dome can help germination.
- When planting our herbs outdoors, watch the forecast and use a frost blanket, when necessary, to protect delicate herbs.
- For many herbs you are able to take cuttings and root in water to start a new plant.

Herb pruning tips.

- It's best to prune the top third of herb plants, like dill and basil, before they flower. This will increase the growth lower on the plant.
- Monitor perennial herbs; ex. mint is invasive; prune by pulling it from the root to prevent spreading. Tip! Plant mint in a container to prevent it from invading your garden.

How to enjoy herbs year-round.

- With the right care you can grow herbs indoors year-round; perfect for a kitchen windowsill.
- You can store herbs to enjoy them year-round. Wash your herbs, then preserve them by hang drying or freezing in olive oil, or water.
- Herbs take a long time to dry. Dry for at least a month, more depending on conditions.



Annual plants will not survive the winter and must be replanted the following year. Whether a plant is an annual or perennial depends on the hardiness zone.

Start Indoors

Direct Sow

 Plant & Cover

Calgary & Area Growing Se	ıson
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	,	WINTER		S	PRING			SI	JMMER		FALL				
Annual Flowers	JAN	FEB	MAR	APR	MAY	JUN		JUL	AUG	SEP	ОСТ	NOV	DEC		
Alyssum					/	M ••	•								
Ammi					ł	• • •	•	• • • •	• • •						
Caledula						• ◊ ◊	•	• •							
Celosia					/	00									
Clarkia						• • •	•								
Cleome						• • •	•	• •							
Collinsia					• •	• • •	•	•							
Cornflowers					=••	• ◊ ◊									
Cosmidium					İ	• • •									
Cosmos					= = =/	00									
Gaura					= = 🚫										
Gilia					/										
Gypsophila					/										
Iberis					= = =/	10-	•	•••	•						
Impatiens						- ◇ ◇									
Lavatera					/	2000	•	•							
Lobelia						$\Diamond \Diamond$	•	• • •							
Marigold					=/										
Morning Glory				-	/										
Nasturtiums				-	/	100 • •	•	• • •							
Nemophila					/	50-	•	•							



Biennial Flowers

Wildflowers (some varieties)

Cynoglossum

Digitalis

Lunaria

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Annual plants will not survive the winter and must be replanted the following year. Whether a plant is an annual or perennial depends on the hardiness zone.

Calgary & Area Growing Season — WINTER **SPRING SUMMER FALL** Annual Flowers (Continued) SEP OCT IAN **FEB** MAR **APR** MAY IUN JUL **AUG** NOV **DEC** Nicotiana Nigella . . . Oenothera Phacelia Physalis Poppies (some varieties) Saponaria (in zone 4) Scabiosa Snapdragons Stocks Strawflower Sunflowers Sweet Peas Tithonia Viola Wildflowers (some varieties) Zinnia

Biennial plants have a two-year life cycle; they grow one year, flower, self seed and die the next.







Some Varieties are Native to the Praries

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Plant Started Seeds Outdoors Plant &

If treated well, perennial plants can survive winter and regrow the following season. Whether a plant is an annual or perennial depends on the hardiness zone.

Calgary & Area Growing Season

	WINTER SI					PRING				Sl	JMMER		FALL			
Perennial Flowers	JAN	FEB	MAR		APR	MAY		JUN		JUL	AUG	SEP		ОСТ	NOV	DEC
Agastache					-		\Diamond	\Diamond								
Asclepias							\Diamond	◊••								
Aurinia							•	• • •								
California Poppies						• • •	•	• • •	•	• • • •						
Columbine							\Diamond	\Diamond								
Delphinium							\Diamond	◊ • •								
Dianthus						•	•	◊ ◊ •								
Echinacea							\Diamond	◊ • •								
Eriophyllum						• •	•	•••	•	• • •						
Gaillardia							•	• 🛇 🛇								
Hollyhock					-		\Diamond	\Diamond								
Lupin							\Diamond	◊••								
Poppies (some varieties)						•	•	• •								
Rudbeckia							\Diamond	\Diamond								
Saponaria (in zone 3)							\Diamond	\Diamond								
Veronica							\Diamond	◊ • •								
Wildflowers (some varieties)						•		• • •	•	• •						
Yarrow							\Diamond	\Diamond								

Perennial maturity and flowering.

Perennial plants, specifically the roots, can take up to one year to fully establish. If your perennial plant doesn't flower the first year, don't worry. It can take time for it to mature enough to flower.

How to prep your perennials for winter.

- Water your perennial well before the first freeze of the year.
- An extra layer of mulch can insulate the roots and protect newly planted and tender perennials from harsh winter weather.

Divide and conquer!

Once a perennial plant gets too large for the spot in your garden, you can divide the plant to make new smaller plants. By dividing large perennials you can fill out your garden, or share with friends and family.