GrowSmart

Frost Date Cheat Sheet

Zone-by-zone frost dates, seed starting math, direct sow timing, and fall planting countdowns for zones 2a–12a across Canada and the US.

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Why Frost Dates Matter

Your local frost dates determine your entire growing season. Your last spring frost and first fall frost are the two dates every planting decision hangs on.

These dates are historical averages based on decades of weather data. The window between them is your frost-free growing season. Every planting date — indoor starts, direct sows, transplants, and fall crops — is calculated from these two numbers.

Microclimate matters too. Urban heat islands, proximity to large bodies of water, elevation, and south-facing slopes can shift your effective frost dates by 1–3 weeks compared to the zone average. GrowSmart uses city-level data rather than zone-wide estimates to account for this.

> GrowSmart Tip: Most garden planners use generic zone averages. GrowSmart calculates by city — your planting windows are based on your specific frost dates across 710+ cities, not a zone-wide guess.

Frost Dates by Zone

Average dates across North America. Your city may differ by 1–2 weeks. GrowSmart provides city-specific dates.

Zone	Last Spring Frost	First Fall Frost	Frost-Free Days	Example Cities
2a–2b	Jun 1–15	Aug 25–Sep 5	~75–95	Fairbanks AK, Fort Vermilion AB
3a–3b	May 20–Jun 5	Sep 5–18	~95–115	Intl Falls MN, Saskatoon SK
4a–4b	May 10–25	Sep 15–28	~115–140	Calgary AB, Duluth MN
5a–5b	May 1–15	Sep 25–Oct 10	~140–160	Ottawa ON, Minneapolis MN
6a–6b	Apr 20–May 5	Oct 5–20	~155–180	Halifax NS, Detroit MI
7a–7b	Apr 10–25	Oct 15–Nov 1	~175–200	Victoria BC, New York City
8a–8b	Mar 20–Apr 10	Oct 25–Nov 15	~200–235	Vancouver BC, Seattle WA
9a–9b	Feb 15–Mar 15	Nov 15–Dec 15	~250–300	Houston TX, Phoenix AZ
10a–10b	Jan 30–Feb 15	Dec 10–31	~300–340	Miami FL, San Diego CA
11a–12a	Frost-free or nearly frost-free		~340–365	Honolulu HI, Key West FL

Indoor Seed Starting Math

Count backward from your last frost date by the number of weeks a crop needs indoors. This is the most common calculation in garden planning.

The Formula

Indoor Start Date = Last Frost Date − (Weeks Indoors × 7 days)

Zone 5b Example (Last Frost: May 6)

Crop	Weeks Before Last Frost	Zone 5b Start Date
Tomatoes	6–8 weeks	Mar 11 – Mar 25
Peppers	8–10 weeks	Feb 25 – Mar 11
Eggplant	8–10 weeks	Feb 25 – Mar 11
Broccoli	5–7 weeks	Mar 18 – Apr 1
Cabbage	5–7 weeks	Mar 18 – Apr 1
Lettuce	4–5 weeks	Apr 1 – Apr 8
Herbs (basil)	6–8 weeks	Mar 11 – Mar 25

Zone 7a Example (Last Frost: Apr 15)

Crop	Weeks Before Last Frost	Zone 7a Start Date
Tomatoes	6–8 weeks	Feb 18 – Mar 4
Peppers	8–10 weeks	Feb 4 – Feb 18
Eggplant	8–10 weeks	Feb 4 – Feb 18
Broccoli	5–7 weeks	Feb 25 – Mar 11
Cabbage	5–7 weeks	Feb 25 – Mar 11
Lettuce	4–5 weeks	Mar 11 – Mar 18
Herbs (basil)	6–8 weeks	Feb 18 – Mar 4

Direct Sow Timing

Some crops go straight into the ground. Soil temperature matters more than air temperature for germination.

Soil Temp	Crops	Typical Timing
2–4°C (35–40°F)	Peas, spinach, fava beans	4–6 weeks before last frost
7–10°C (45–50°F)	Carrots, beets, radish, lettuce	2–4 weeks before last frost
10–15°C (50–60°F)	Beans, corn, squash	At or after last frost
15°C+ (60°F+)	Cucumber, melon, okra, sweet potato	2+ weeks after last frost

> GrowSmart Tip: A soil thermometer is the single best $10 tool you can buy. Air temperature can be misleading — soil warms more slowly in spring and holds heat longer in fall.

Fall Planting Countdown

Fall planting is calculated backward from your first fall frost. You need to account for the crop's days to maturity plus a buffer for slowing growth as days shorten.

The Formula

Last Sow Date = First Fall Frost − Days to Maturity − 14-day buffer

Zone 5b Example (First Frost: Oct 5)

Crop	DTM	Buffer	Zone 5b Last Sow
Lettuce	45–55 days	14 days	Aug 1–10
Spinach	40–50 days	14 days	Aug 5–15
Radish	25–35 days	14 days	Aug 20–30
Kale	55–65 days	14 days	Jul 20–30
Peas	55–70 days	14 days	Jul 15–Aug 1
Bush beans	50–60 days	14 days	Jul 20–30
Beets	50–65 days	14 days	Jul 20–Aug 1
Carrots	60–80 days	14 days	Jul 5–25

Zone 7a Example (First Frost: Oct 25)

Crop	DTM	Buffer	Zone 7a Last Sow
Lettuce	45–55 days	14 days	Aug 20–Sep 1
Spinach	40–50 days	14 days	Aug 25–Sep 5
Radish	25–35 days	14 days	Sep 10–20
Kale	55–65 days	14 days	Aug 10–20
Peas	55–70 days	14 days	Aug 1–15
Bush beans	50–60 days	14 days	Aug 10–20
Beets	50–65 days	14 days	Aug 10–20
Carrots	60–80 days	14 days	Jul 25–Aug 15

GrowSmart Tip: GrowSmart auto-calculates fall planting windows for every crop in your garden, using your city's actual first frost date — not a zone estimate. Zone 7a gardeners get about 20 extra days of fall planting compared to 5b.

Ready to automate your planting schedule?

GrowSmart builds personalized timelines based on your city's frost dates — spring, summer, and fall.

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