

Fall Vegetable Back-Counting Worksheet (Days to Maturity, Frost Buffer, and Short-Day Adjustment)

Companion Reference Sheet for: Fall Planting Calendar: Why Crop Timing Changes by Region
Save this PDF to your phone or print a copy for field reference. Verify local conditions and manufacturer specs before use.

Key Takeaways

- **Use the right regional measure.** A USDA hardiness zone describes winter cold, while the first fall frost and frost free period help you schedule fall vegetables.
- **Adjust for your site.** Elevation, slopes, low spots, sun, wind, and nearby buildings can shift frost risk within the same county.
- **Count backward from your goal.** Subtract days to maturity from the expected frost date, then allow extra time for cooler weather and shorter days.
- **Match the method to the crop.** Direct sowing and transplanting use different maturity starting points, so calculate the deadline accordingly.
- **Plan for frost tolerance.** A crop that survives frost may grow slowly in cold weather, and survival does not mean it will reach your preferred harvest stage.
- **Keep practical garden advice close.** Our [gardening guides from The Garden Den](#) offer more ways to plan and care for a productive garden.

Each regional measure answers a different question

Hardiness zone	First fall frost	Growing season length	Scheduling use
Classifies average annual extreme minimum winter temperature	Use a separate local frost estimate	Not defined by the zone alone	Useful for winter survival, not a stand alone fall sowing date
Far southern Illinois, check the local zone map separately	Pair a local frost estimate with crop maturity	215 days	Use the regional season length as context, then count backward for each crop
Far northern Illinois, check the local zone map separately	Pair a local frost estimate with crop maturity	180 days	Use the regional season length as context, then count backward for each crop
Texas Region I, broccoli example	Use the regional crop calendar alongside local frost information	Not the measure shown in this example	Average broccoli planting date: July 15

Hardiness zone	First fall frost	Growing season length	Scheduling use
Texas Region V, broccoli example	Use the regional crop calendar alongside local frost information	Not the measure shown in this example	Average broccoli planting date: November 1

Read the bed, not just the map

Garden feature	Likely temperature effect	Practical scheduling adjustment
Low spot or hollow	Cold air can collect and raise frost exposure	Use a more frost cautious deadline for sensitive crops or plant in a better drained area
Gentle slope	Air can move downhill rather than pool at the bed	Compare observed temperatures with a low lying part of the yard before shifting dates
Sunny exposure or nearby building	Sun and stored heat can make the spot warmer	Track the bed's actual conditions instead of assuming a fixed extension
Shade or strong wind	Shade can slow growth; wind can increase drying and plant stress	Allow more time for growth and avoid exposing young seedlings to added stress
Higher elevation	Conditions can be cooler than nearby lower ground	Use local readings and a cautious frost estimate for the specific site

Set a deadline that matches the harvest you want

Calculation step	Illustration	Why it matters
Sample first fall frost date	October 15	Planning reference for this example only
Days to maturity	60 days	Use the estimate that matches the crop and its maturity starting point
Fall growth buffer	Extra time	Allows for slower growth and local uncertainty
Total time to count backward	60 days plus extra time	60 days plus the buffer
Illustrative latest sowing date	Depends on the buffer	Work backward from the sample frost date after adding time for slower fall growth

Let soil temperature and crop development guide the method

Method	Suitable situation	Timing basis	Soil temperature cue
Direct sowing	Quick growing crops with suitable bed moisture and seed conditions	Count days to maturity from sowing	Cool season lettuce, spinach, kale, carrots, and onions germinate best once soil reaches 55 degrees Fahrenheit or warmer
Indoor starting	Seedlings need protected early growth or more time before moving outdoors	Include seedling raising time, then use the maturity estimate's stated starting point	Use the needs of the specific crop; a cool season threshold does not apply to every seed
Transplanting	A crop benefits from established seedlings and the bed can support them	Count from transplanting when that is how the maturity estimate is defined	Warm season tomatoes, peppers, squash, cucumbers, and corn require soil temperatures of 75 degrees or warmer to establish properly, according to Michigan State University Extension

Follow this field checklist before planting

Turn the regional calendar into a bed specific plan

- ☐ **Find the local average first fall frost date.** Record the source and year of the estimate, and remember that an average is not a promised frost date.
- ☐ **Describe the bed's microclimate.** Note elevation, slope, sun exposure, wind exposure, and nearby structures. Mark low spots where cold air can collect and warmer locations that may hold heat.
- ☐ **Choose the crop and harvest stage.** Decide whether you want young leaves, full sized produce, or another harvest stage. Check frost tolerance and whether days to maturity begin at sowing or transplanting.
- ☐ **Measure soil temperature at planting depth.** Compare the reading with the crop's germination needs, and do not sow cool season seed into soil that is still too warm.
- ☐ **Count backward from the frost date.** Add a fall growth buffer, then choose direct sowing or transplanting according to the time remaining and the crop's maturity estimate.
- ☐ **Keep a planting record.** Write down each sowing date and expected harvest window, then revise later sowings if temperatures or crop growth differ from the plan.

I appreciate a simple garden record because it replaces guesswork with observations from the actual bed. A few notes about sowing dates, soil temperature, and harvest progress make next season's fall planting calendar easier to adapt.