Fall Crop Considerations

Crops that prefer cooler weather usually thrive better in the fall since temperatures start warm and cool down.

All cool season crops can tolerate frost, some can tolerate a light freeze.

Fast maturing warm season crops can be replanted mid-summer for a fall crop.

Frost & Freeze Dates

Weather data is used to offer a prediction of last and first frost dates.

Usually calculated from data over 3 decades.

Dates are not perfect – but offer guidance.

Categories are:
- Light Frost: 36 °F
- Frost: 32 °F
- Freeze: 28 °F
- Hard Freeze: < 28 °F

Offer probabilities at three different levels:
- 10% - very unlikely
- 50% - average or median likelihood
- 90% - very likely
<table>
<thead>
<tr>
<th>Temperature</th>
<th>Category</th>
<th>Plant Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 °F</td>
<td>Light frost</td>
<td>May damage warm season crops</td>
</tr>
<tr>
<td>32 °F</td>
<td>Frost</td>
<td>• Will kill: Annual herbs, Beans, Corn, Cucumber, Eggplant, Melons, Pepper, Potato, Pumpkin, Tomato, Squash</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• May damage but not kill freeze tolerant plants</td>
</tr>
<tr>
<td>28 °F</td>
<td>Freeze</td>
<td>• Will kill: Beet, Carrot, Cauliflower, Lettuce, Onion, Pea, Spinach, Swiss Chard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• May damage but not kill hard freeze tolerant plants</td>
</tr>
<tr>
<td>&lt; 28 °F</td>
<td>Hard Freeze</td>
<td>Will kill: Broccoli, Brussels Sprouts, Cabbage, Kale, Kohlrabi, Turnip</td>
</tr>
</tbody>
</table>

https://mrcc.illinois.edu/VIP/frz_maps/area_080.html#frzMaps

Very General Sowing & Planting Dates

Source: www.ufseeds.com
**How to Figure Out the Planting Date**

- Number of days from seeding or transplanting out-doors to harvest.
- Number of days from seed to transplantable size
- Average harvest period
- Fall Factor (about 14 days)
- Frost Tender Factor (14 days) (if applicable)
- Add these factors = # of Days to Count Backward from frost/freeze date

**Counting Backwards to Schedule Planting**

- Calendar – Write and Keep Track
- Day before Fall Frost Date – Starting Point
- Frost Date Map
- Frost Tender Crop List
- Research Crops and Varieties Ahead – find days to maturity on packet/profile
- If you can’t figure out how to count backward: https://www.timeanddate.com/date/duration.html

**Median Fall Frost Map**

- Nebraska Fall Frost Dates Profiled
  https://cropwatch.unl.edu/nebraska-fall-frost-dates-profiled-unl-cropwatch-sept-20-2013

**The Fall Planting Equation**

Days to Maturity
+ 14 Day Harvest Period
+ 14 Day “Fall Factor”
+ 14 Day Frost Factor for tender/warm season crops (if needed)
= # of Days to count back from first frost date

**Garden Planting Guide**

https://cmg.extension.colostate.edu/Gardennotes/720.pdf
Examples:

‘Tenderette’ Green Beans - North Platte, Nebraska
56 Days to Maturity
October 6-16 Median Fall Frost – Use October 11
Add:
  56 Days to Maturity
  + 14 Days Harvest Period
  + 14 Days Frost Tender
  = 98 Days

Count Back Starting October 10
Planting date = July 4

‘Eastern Magic’ Broccoli - Lincoln, Nebraska
62 Days to Maturity
October 21-31 Median Fall Freeze – Use October 26
Add:
  74 Days to Maturity
  + 14 Days Harvest Period
  + 14 Days Fall Factor
  = 90 Days

Count Back Starting October 25
Planting date = July 27

Online Calculator

https://seedsforgenerations.com

Online Calculator Steps

Input your own first Fall Frost Date in the orange cell by double-clicking on it. When you press Enter, the calculator will calculate all the other dates.

Use the Start Indoors dates for seeds you're starting inside or in trays/containers to transplant later, and Plant in ground for anything that you're sowing directly into the garden or for the transplanting date for seedlings (these are based on you planting the seedlings on the Start Indoors date).

The Days before FF column is basically the Days to Maturity - how long it will take for that crop to mature to harvest...

If you need to change the timelines based on a variety you have that is significantly different from the average dates used, you can edit the Days after FF section to increase or decrease the number of days used to calculate the planting dates.

Negative numbers in the Days left to plant column mean that you are past the calculated latest planting date (but you can extend those if you use season extension techniques). If the Days left to plant is positive, the Available to Plant column will display Yes, meaning you still have time left to plant those.

Season Extension

Extends season through early and late planting
Some techniques may help with insect pests
Variety of options