



# SPRING FIELD VEGETABLE PRODUCTION DURING THE COVID-19 PANDEMIC

*Spring came early this year, despite the COVID-19 pandemic. As of mid-April, it appears that spring frosts are gone except for the mountains. That means it's time to sow and transplant!*

*In order to have a bountiful harvest, consider the following for your field vegetable production.*

## **IMPORTANT!**

SARS-CoV-2, the causal virus for COVID-19, does not live on plants. You are safe to physically contact and transplant seeds.

Farmers are essential agricultural employees who can continue to farm during this COVID-19 crisis.

- Prepare and keep on hand a Notice of Essential Food and Agricultural Employee work authorization form, issued and signed by Steve Troxler, NC Commissioner of Agriculture. You can download the form [here](#).
- \* If you are sick, do not work. Follow the CDC guidelines and stay at home.
- \* If possible, practice social distancing with other workers at the work site.



## Seeds and transplants

- Order typical non-transplant vegetable seeds, such as beans, radish and sweet corn, right away if you have not already done so. Consider planting some fast-growing vegetables (radish, bok choy, etc.) and selling them as salad greens.
- Check with your contract nursery for earlier transplant delivery.
- If raising your own transplants, make sure to harden them off for five to seven days before transplanting.
- Most garden centers and some farmers markets are still open if extra transplants are needed. See the [North Carolina Farm Fresh website](#) for a farmers market directory.

## Field preparation

- Till and disc field.
- Apply pre-plant fertilizer based on soil testing. If you did not do a soil test, apply 60% fertility requirement of a vegetable species as pre-plant fertilizer.
- Make raised beds. Use bare soil beds for direct seed vegetables and plastic mulch beds for transplanting crops.
- If you share equipment, make sure to clean and sanitize it before using.



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## Time to sow or transplant

- Identify the average date of the last spring freeze in your region (see map below).



- In general, you can plant cool season vegetables one or two weeks before the average date of the last spring freeze. Plant warm season vegetables two to three weeks after the average date of the last spring freeze.
- To more accurately determine your planting time, check [www.weather.com](http://www.weather.com) for the most recent local forecast. Enter your zip code and click on “10 Day.”
  - April is too late to plant cold hardy vegetables, such as spinach.
  - Minimum air and soil temperatures of 40 degrees Fahrenheit are needed for cool season vegetables, such as broccoli, cabbage, greens, lettuce and potatoes. They grow best between 60 and 75 degrees.
  - Minimum air and soil temperatures of 50 degrees are needed for warm season vegetables, such as beans, tomatoes, peppers, okra and cucumbers. They grow best between 72 and 86 degrees.
  - Apply row covers to protect cool-season vegetables when night temperatures fall below 40 degrees, and to protect warm season vegetables when temperatures are below 50 degrees.



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## Workforce issues and COVID-19

- If you use H-2A workers, please keep updated at <https://www.farmers.gov/manage/h2a>. There might be delays in getting workers for your farm.
- The U.S. Department of Labor has resources to help workers and employers deal with the COVID-19 pandemic. Visit <https://www.dol.gov/coronavirus> for information.

## Plant management

- Irrigate and fertigate based on the needs of your crops.
- Trellis fruiting vegetables (e.g., tomatoes, peppers and eggplant) in a timely manner. Prune off lateral buds (suckers) and old leaves below the first fruit cluster.
- Use integrated pest management tactics for pest control.
- Harvest early based on your customers' needs.

## Marketing

- The NC Department of Agriculture and Consumer Services (NCDA&CS) has a [marketing site](#) providing market options during the pandemic.
- Find out if your local farmers markets are open, and their requirements for sanitization, by visiting the [North Carolina Farm Fresh website](#). Also make sure to read the [COVID-19 FAQ for Farmers Markets](#).
- Work with your subscribers on delivery options and sanitize produce boxes using [EPA- approved disinfectants for SARS-CoV-2](#).



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- If you operate a farm stand, notify your customers if you plan to stay open.
- If you run a U-pick operation, NCDA&CS has issued a press release with [hints on operating under COVID-19 restrictions](#).
- Most restaurants remain open for deliveries and pickups. However, university cafeteria sales might be a challenge now because of school closings.
- Cooperative Extension has created [guidelines for developing an online store](#).
- If finding markets for your produce is a problem, [let the NCDA&CS know](#).

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