

# Eastern North Carolina Planting Calendar for Annual Vegetables, Fruits, and Herbs

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Eastern North Carolina is a wonderful place to garden. Almost any type of vegetable can be grown successfully provided you choose appropriate varieties and plant at the right time. The climate, the season, and potential pests all affect the selection of what and when to plant.

## Adapted to Climate

Freezing temperatures, high temperatures, humidity, and solar intensity, all common in eastern North Carolina, can stress plants. To successfully grow plants in this environment, select varieties that are tolerant of temperature extremes, plant at the appropriate times to avoid temperature extremes, or plan to protect the plants. It is possible to grow plants out of season by creating microclimates that differ from the overall climate by providing shade, humidity, or artificial heat.

## Seasons

We have three optimal growing seasons: spring, summer, and fall. Both day length and temperature vary dramatically between seasons (short days and cold temperatures in winter to long days and high temperatures in summer). Because few annual plants are

suited to thrive in both circumstances, it is important to choose plants that mature quickly to ensure a complete life cycle within one season. Some plants are adapted to growing in the cool months of the year and will tolerate some frost (cool-season vegetables, Figure 1), while others do not tolerate frost and should be planted to grow outside only in frost-free months (warm-season plants, Figure 2). Even warm season plants have their limits and will temporarily stop bearing during heat waves (temperatures in mid 90s).

## Disease and Pest Resistance

Choose varieties that have been bred to resist diseases and pests. Some companies list resistance on the plant tag, the seed package, or in a seed catalog. Many companies use initials following the plant variety name. For example, "V" may mean resistant to Verticillium wilt disease, "N" may indicate resistance to nematodes, "F"



Figure 1. Cool-season vegetables can tolerate colder temperatures and some frost.



Figure 2. Warm-season vegetables don't tolerate frost and should only be planted outside when frost is no longer a threat.

may indicate resistance to Fusarium wilt disease, and "T" may indicate resistance to Tobacco Mosaic virus. Different companies use different symbols, so be sure to check their respective keys to understand the labeling. Choose a planting date to avoid known pest seasons. Delay fall planting until whitefly populations decline with cooler temperatures, for example, or delay spring planting until soils become warm to reduce fungal and bacterial disease problems.

## Cultivars

Select varieties that provide desirable yield, taste, texture, and color. Using varieties that mature quickly may help avoid insect and disease problems. New varieties are released each year, and other varieties may become unavailable. Check with your local Extension website, Extension Master Gardener volunteers, or Extension agents for the varieties best adapted to your area. You can also read vegetable variety reviews from gardeners across the country online at [vegvariety.cce.cornell.edu](http://vegvariety.cce.cornell.edu).

## Planting Dates

The dates in Table 1 are suggested guidelines and should provide the highest probability of success, but weather conditions vary from year to year and planting dates should be adjusted accordingly. Gardeners at the coast can plant up to two weeks earlier in the spring and two weeks later in the fall. Plants established in the middle of the recommended planting dates will do best with lower success rates at both the earlier and later recommended and planting dates. The dates on the chart are for planting out in the garden (Figure 3). If you provide shade in the summer and frost protection in the winter, you may be able to extend the season both before and after these recommended dates. Spunwoven covers can allow you to begin your garden earlier in the spring and extend it



Figure 3. Vegetables planted out in the open.



Figure 4. Start seedlings six to eight weeks prior to transplanting them.

longer into the fall. In addition, plastic mulches can be used to produce vegetables earlier in the season. Planting additional plants every few weeks within the planting window will extend your harvest over a greater period.

## Transplants

When growing your own transplants, start seedlings six to eight weeks before transplanting them into the garden (Figure 4). Protect tender transplants from severe temperature conditions. Harden them off prior to transplanting by gradually introducing them to the new environment. Just before transplanting, take them outside for increasing periods each day until they are acclimated to the new temperature and light conditions.

**Table 1. Garden Planting Calendar for Vegetables, Fruits, and Herbs in Eastern North Carolina**

Fruit, Herb, or Vegetable	Days to Harvest (from seed unless otherwise noted)	Distance Between Plants (inches)	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
			1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1
Artichokes, globe	T = 1 year	30							T	T																	
Artichokes, Jerusalem*	Tu = 6–8 months	9–12						Tu	Tu																		
Arugula	40–50	6–9		S	S	S	S	S									S	S	S	S	S						
Asparagus	C = 2 years	18		C	C	C	C																				C
Basil	T = 14–35 S = 50–75	2–8								S, T	S, T	S, T	S, T	S, T	S, T	S, T											
Beans, lima/bush	65–80	6								S	S	S	S	S	S	S											
Beans, lima/pole	75–95	6								S	S	S	S	S	S	S											
Beans, snap/bush	50–55	2							S	S	S	S	S	S	S	S	S	S	S	S	S						
Beans, snap/pole	65–70	6								S	S	S	S	S	S	S	S	S	S	S	S						
Beets	55–60	2							S	S						S	S	S	S								
Broccoli	T = 70–80	18						T	T	T							T	T	T								
Brussels sprouts	T = 40–50 S = 90–100**	14–18													T	T	T	T									
Cabbage	T = 63–75 S = 90–120**	12														T	T	T	T								
Cabbage, Chinese	T = 45–55 S = 75–85	12															S	S		T	T						
Carrots	75–80	2		S	S	S	S	S						S	S	S	S	S	S								
Cauliflower	T = 55–65 S = 85–95	18															S, T	S, T	S, T	S, T	S, T						
Celery	T = 40–70 S = 120–150**	6–8													T	T	T	T									
Chard, Swiss	T = 32–42 S = 60–70	6							S, T	S, T	S, T						S, T	S, T	S, T								
Cilantro	50–55	2–4		S	S	S	S	S												S	S						

**Table 1. Garden Planting Calendar for Vegetables, Fruits, and Herbs in Eastern North Carolina (continued)**

Fruit, Herb, or Vegetable	Days to Harvest (from seed unless otherwise noted)	Distance Between Plants (inches)	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec		
			1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1	15	1
Collard greens	T = 32-72 S = 60-100	18																									
Corn, sweet	85-90	12																									
Cucumbers	T = 28-37 S = 56-65	12																									
Dill	40-55	2-4																									
Eggplant	T = 90-95 S = 150-155**	24																									
Fennel, Florence	60-90	6-12																									
Garlic	B = 180-210	4-6																									
Kale	T = 14-22 S = 40-50	6																									
Kohlrabi	T = 22-32 S = 50-60	4																									
Leek	T = 50-80 S = 120-150	4																									
Lettuce, head	T = 45-60 S = 70-85	10																									
Lettuce, leaf	T = 15-25 S = 40-50	6																									
Melons, cantaloupe	T = 57-62 S = 85-90	24																									
Melons, watermelon	T = 62-72 S = 90-100	60																									
Mustard	30-40	2																									
Okra	T = 18-28 S = 60-70	12																									
Onions, bulb	B = 75-105 S = 90-120	4																									
Onions, green	T = 42-56 S = 60-70	1-2																									



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## References

Brandenburg, R., D. Jordan, B. Shew, J. Wilcut, and S. Toth. 2005. Crop Profile for Peanuts in North Carolina. [www.ipmcenters.org/cropprofiles/docs/ncpeanuts.pdf](http://www.ipmcenters.org/cropprofiles/docs/ncpeanuts.pdf).

Bratsch, A. 2009. Specialty Crop Profile: Globe Artichoke. Publication 438-108. Virginia Cooperative Extension. [pubs.ext.vt.edu/438/438-108/438-108\\_pdf](http://pubs.ext.vt.edu/438/438-108/438-108_pdf).

Jones, D. and D. Roos. Planting and Harvesting Guide for Piedmont Vegetables and Herbs. North Carolina Cooperative Extension. [www.ces.ncsu.edu/chatham/ag/SustAg/plantharvestguide2008.pdf](http://www.ces.ncsu.edu/chatham/ag/SustAg/plantharvestguide2008.pdf).

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McCarthy, W. and D. Sanders. 2001. Celery. HIL-27. Raleigh, NC: North Carolina Cooperative Extension. [content.ces.ncsu.edu/celery](http://content.ces.ncsu.edu/celery).

Putnam, D.H., E.S. Oplinger, D.R. Hicks, B.R. Durgan, D.M. Noetzel, R.A. Meronuck, J.D. Doll, and E.E. Schulte. 2011. Alternative Field Crops Manual: Sunflower. University of Wisconsin and University of Minnesota. [www.hort.purdue.edu/newcrop/afcm/sunflower.html](http://www.hort.purdue.edu/newcrop/afcm/sunflower.html).

Schultheis, J. 1999. Growing Jerusalem Artichokes. HIL-1-A. Raleigh, NC: North Carolina Cooperative Extension. [content.ces.ncsu.edu/growing-jerusalem-artichokes](http://content.ces.ncsu.edu/growing-jerusalem-artichokes).

Schultheis, J. 1998. Muskmelons (Cantaloupes). HIL-8. Raleigh, NC: North Carolina Cooperative Extension. [content.ces.ncsu.edu/muskmelons-cantaloupes](http://content.ces.ncsu.edu/muskmelons-cantaloupes).



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