



Using Average Freeze Dates for Starting Vegetable Seeds

The average last spring freeze (32° F.) date and average first fall freeze (32° F.) date can be used as guides for determining when to start vegetable seeds indoors. These dates are also utilized to guide gardeners in determining when certain vegetables can be planted directly outdoors into their garden. Notice that **frost** is not used in determining the average freeze dates. Frost is defined as the deposit of ice crystals on the surface of plants or other ground objects. A frost often does not occur in subfreezing temperatures. In addition a frost may occur even when the reported temperature is above the freezing level (at approximately 5 feet above ground level - the height normally used for recording temperatures). Remember these are average dates – the exact date can not be predicted for any given year. Weather on Long Island can be very variable and the same holds true for average freeze dates. Maps of average freeze dates can give you some guidance, but it is important to be familiar with your own location and to adjust these dates accordingly.

The number of days between the last spring freeze and the first fall freeze is referred to as the length of the growing season. On average the growing season length for most of Suffolk County is 200 days although it drops to around 180 days in the cold areas located in the Pine Barren Regions.

Average Last Spring 32°F. Freeze

The following seed starting schedule can be used as a guide to plan the approximate calendar date to sow seeds indoors and to transplant the young plants outdoors. Vegetables not listed are usually seeded directly outdoors. You can also make successive plantings to extend the season and/or to have plants in different stages of development through the growing season.

To use this chart first insert into column #1 the average date for the last spring 32° F. freeze (refer to *Map Number 1*). Then add or subtract the number of weeks in column #2 (Weeks to Set Out). This gives you the approximate date to set or plant the transplants outdoors. Insert this date in column #3 (Set out Date). Subtract from this date the number of weeks in column #4 (Weeks to Grow Indoors). This gives you the approximate date to sow the seeds indoors. Insert this date into column #5 (Sow Indoor Date). The number of weeks given in columns #2 and #4 can be adjusted if necessary based on your own experience. The average date for the last spring 32° F. freeze *is not* used as the safe date to set out tender vegetables.

Example using Average Last Spring 32°F. Freeze

Vegetable	Average Last Freeze Date	Weeks To Set Out	Set Out Date	Weeks To Grow Indoors	Sow Indoor Date
Tomato (Main Season)	April 20	+5 to +7	May 30	-5 to -6	April 18

In this example the average last freeze date used is April 20. We have added 6 weeks to this data for our set time (May 30). We want a 6 week old transplant so we subtracted 6 weeks from May 30 and come up with the date of April 18, which is the data to start the tomato seeds indoors.

Vegetable	Average Last Freeze Date	Weeks To Set Out	Set Out Date	Weeks To Grow Indoors	Sow Indoor Date
Broccoli (Spring*)		-3		-6	
Broccoli (Fall)		+10 to +16		-6	

Vegetable	Average Last Freeze Date	Weeks To Set Out	Set Out Date	Weeks To Grow Indoors	Sow Indoor Date
Brussel Sprouts (Fall)		+10		-6 to -8	
Cabbage (Spring)		-1 to +1		-5 to -7	
Cabbage (Fall)		+10 to +16		-5 to -7	
Cauliflower (Spring*)		-3		-5 to -7	
Cauliflower (Fall)		+10 to +16		-5 to -7	
Eggplant		+6 to +7		-8	
Lettuce (Head)		-3 to +1		-4	
Onion (Seeds)		-3 to +1		-8	
Peppers		+6 to +7		-8	
Tomato (Early Season Type)		+4		-5 to -6	
Tomato (Main Season Type)		+5 to +7		-5 to -6	
Herbs					
Basil (Sweet) (A)		+4		-5 to -6	
Burnet (Salad) (P)		0		-6 to -8	
Caraway (B)		0		-4 to -6	
Chamomile (A)		0		-4	
Chives		-1		-8	
Florence Fennel (A)		0		-4 to -6	
Lemon Balm (P)		0		-6 to -8	
Majoram (Sweet) (A)		0		-6 to -8	
Mint (P)		+1		-8	
Oregano (P)		0 to +1		-6 to -8	
Parsley (A)		0		-8	
Sage (P)		0		-6 to -8	
Summer Savory (A)		0		-6 to -8	
Thyme (P)		-1		-6 to -8	

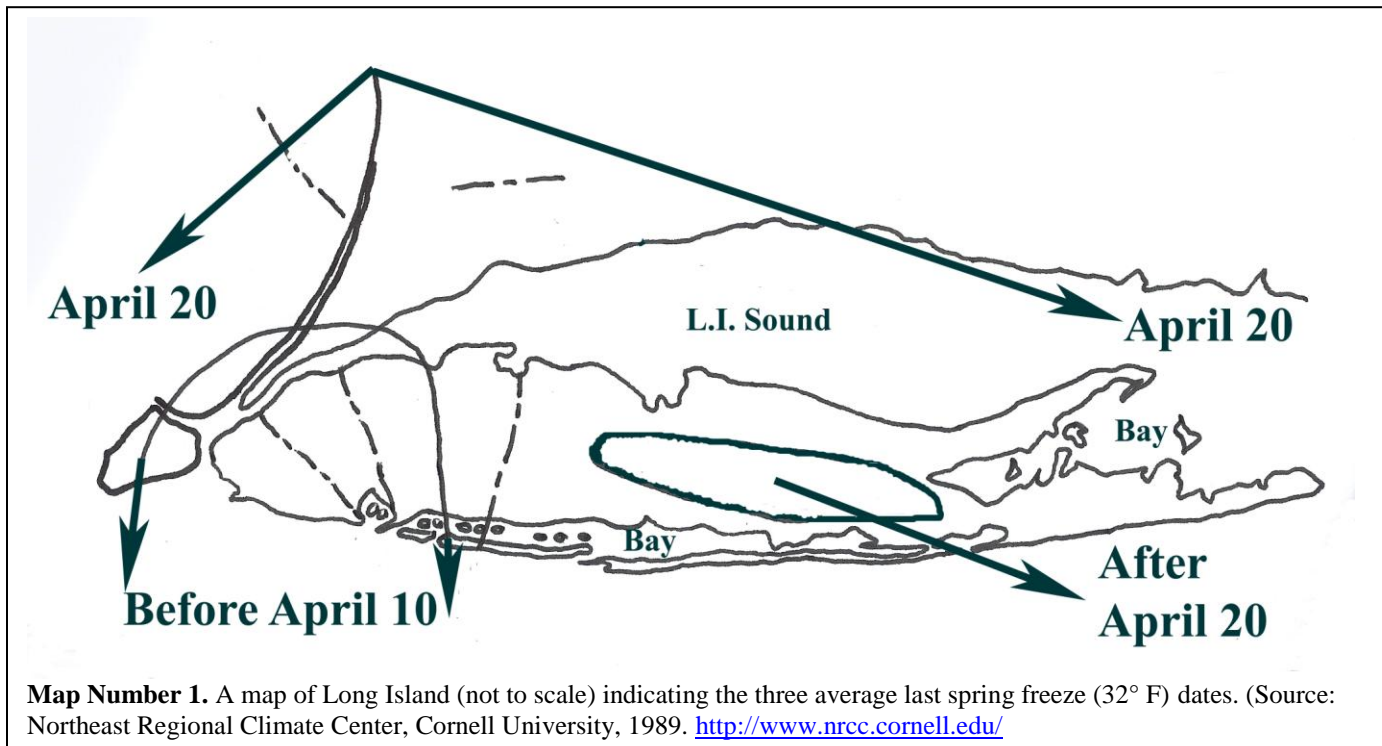
* = Spring broccoli and cauliflower can be subject to bolting ("going to seed").

(A) = Annual, (B) = Biennial, (P) = Perennial

Long Island is separated into three different areas based on the average date of the last spring 32°F. freeze. The dates used are: *before* April 10, April 20th and *after* April 20th. By finding your approximate location on **Map Number 1** below you will be able to find the average date of the last spring 32°F. freeze, which is used in the preceding seed starting schedule. Remember that weather on Long Island varies considerably from location to location and this map is not to scale so that your own experience plays an important role in fine tuning this date

for your use. Also remember that the dates given are averages and that the exact date of the last spring freeze in any on season can not be predicted.

Average First Autumn 32° F. Freeze



The following seed starting schedule can be used to plan the approximate calendar date to sow seeds directly into soil for a fall garden. You can also make successive plantings to extend the autumn growing season. For this reason you many choose to use the following chart as a guide to determine the **last** possible seed date knowing that seeds planted earlier can also be successful for a fall garden.

To use this chart first insert into column #2 the average date for the first autumn 32°F. freeze (refer to **Map Number 2**). Then enter the number of weeks before the first freeze date to seed in column #3 (Weeks Before First Freeze To Seed). Now subtract the number of weeks in column three from the average first freeze date in column #2. This will give you an approximate date to plant seeds outdoors (you can enter this in column #4 for future reference). The number of weeks given in column #3 can be adjusted if necessary based on your own experience.

Example using Average First Autumn 32°F. Freeze

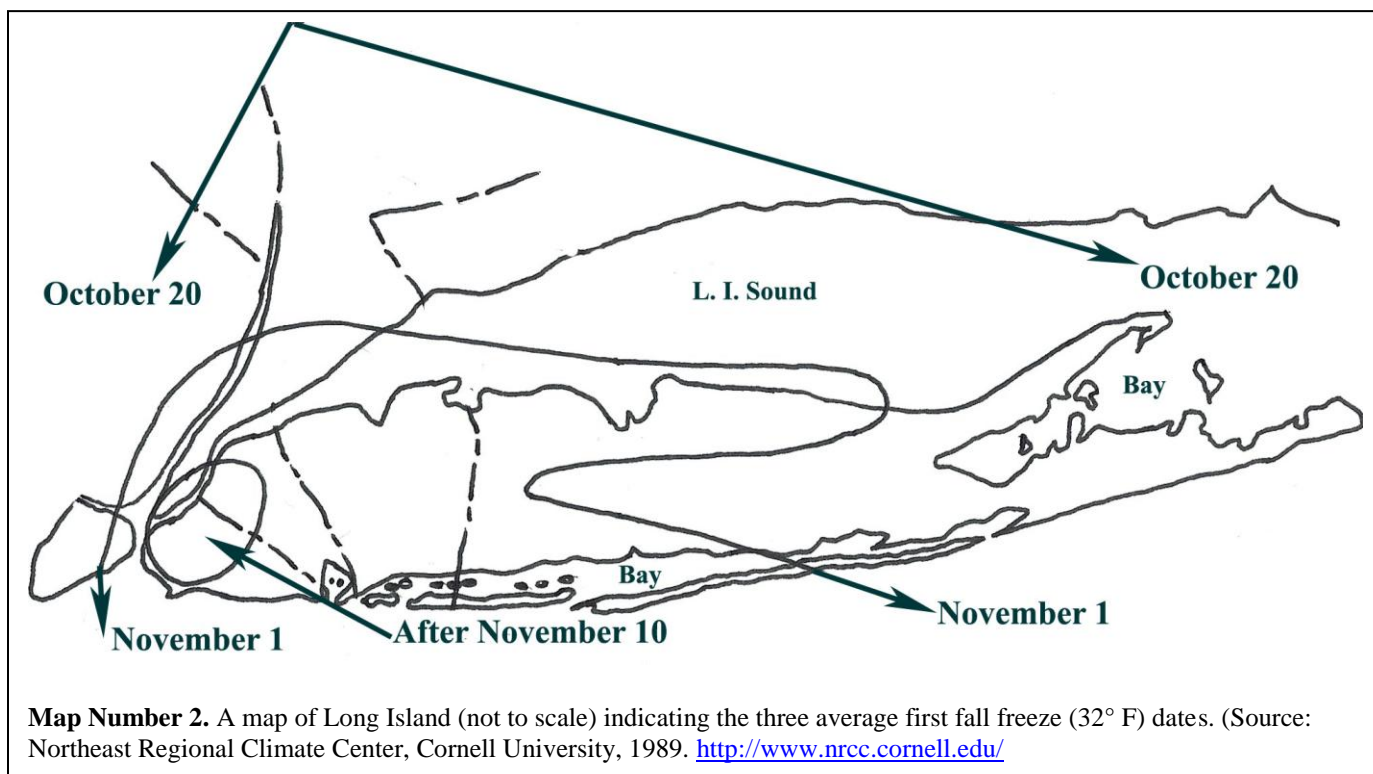
Vegetable	Average First Freeze Date	Weeks Before First Freeze Date To Seed	Sow Date
Radish	October 20	up to 5 weeks	September 12

In this example we are using the average first autumn freeze date of October 20. We subtract 5 week from this date come up with September 22, the day which radish seeds can be planted.

Vegetable	Average First Freeze Date	Weeks Before First Freeze Date To Seed	Sow Date
Beans (Green – Bush)		up to 8 weeks	
Beets		8 weeks	
Chinese Cabbage		10 to 12 weeks	

Collards		10 to 12 weeks	
Kale		10 to 12 weeks	
Kohlrabi		From 10 wks. up to 4 wks.	
Vegetable	Average First Freeze Date	Weeks Before First Freeze Date To Seed	Sow Date
Lettuce		6 to 7 weeks	
Mustard		6 to 8 weeks	
Peas		8 to 10 weeks	
Radish		up to 5 weeks	
Rutabaga		12 to 14 weeks	
Spinach		6 weeks	
Turnip		8 weeks	

Long Island has three separate average dates of the first autumn 32° F. freeze depending on your location. The dates used are *after* November 10, November 1 and October 20. By finding your approximate location on **Map Number 2** below you will be able to find the average date of the first autumn 32° F. freeze used in the preceding seed starting schedule. Remember that weather on Long Island varies considerably from location to location and this map is not to scale so that your own experience plays an important role in fine tuning this date for your use. Also remember that the dates given are averages and that the exact date of the first autumn freeze in any one season can not be predicted.



Resources: *How To Sow Seeds Indoors And Out*. W. Atlee Burpee Co. 1981. *Herbs*. W. Atlee Burpee Co. 1982. "Seed Starting Solutions". Deborah Wechsler. *National Gardening*. January/February 1991. *Park's Success with Seeds*. Anne Reilly. *Park's Success with Herbs*. Foster, G. B. and R. F. Loudon.

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revised February 2009.

TK 2/2009 AW 1/2012