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Understanding the average dates for first and last frosts can help you determine when to safely plant vegetable gardens or annual flowers. These dates vary by location within the county.

Local Frost Dates for Garden Planning

by Emma Connery, UC Master Gardener Program Coordinator

Planning your fall vegetable garden? Take your local frost dates into consideration.

Q. I live in Martinez, when is my first and last frost date? I would like this information to help me know when to plant my vegetable garden.

A. Martinez is in Central Contra Costa County. As a general rule the UC Master Gardeners use November 15th and March 15th as the average first and last frost dates for Central and East County and December 15th and February 15th for West County. Those are pretty easy dates to remember.

You can see by the table of frost dates on the next page that West County (Richmond and other Bayside areas) have far more moderate temperatures. Additionally, the specific location and exposure of your garden, your own microclimate (e.g., valley, hillside, tree cover, bayside, etc.) will affect your “average” frost dates.

An average first and last frost date refers to the days where the temperature drops to 32° F the first and last times of the winter. Depending upon what you are planting, you may also want to know want to know the average hard frost date

which refers to the days where the temperature drops to 28° F, also included in the table.

The weather services provide historical freeze/frost occurrence data for a number of weather stations throughout the county. Data is available from various web sites, including:

The Western Regional Climate Center at <https://www.wrcc.dri.edu/summary/ccaF.html> and The National Centers for Environmental Information at <https://www.ncdc.noaa.gov/normalsPDFacc.aspx> and <https://www.ncdc.noaa.gov/climate normals/clim2osuppl/states/CA.pdf>

The data gathered in the table on the next page indicates a 1-in-10 chance of a first or last frost—or hard frost—before the first date or after the last date.

Average frost dates are just that – averages. In any given year, the actual date of frost may be weeks before or after the “average” frost date. Knowing the probabilities can help you decide how much of a risk you want to take.



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Approximate Dates of 1-in-10 Chance of Frost for Contra Costa County				
	First Frost at 32° F	Last Frost at 32° F	First Hard Frost at 28° F	Last Hard Frost at 28° F
Antioch	November 9	March 13	November 23	February 9
Martinez	November 11	March 27	December 11	January 28
Richmond	December 20	February 10	none	none

First frost dates: for each location, there is a 1-in-10 chance of first frost at 32° F or first hard frost at 28° F **before** the date shown.

Last frost dates: for each location, there is a 1-in-10 chance of last frost at 32° F or last hard frost at 28° F **after** the date shown.

Editor's note: these dates are based on data collected up through 2001. The effect that climate change will have on frost dates is currently unknown.