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Sweet Cherry Frost Damage Chart

Critical spring temperatures by bud stage, from Michigan State University Extension's compilation of the WSU and MSU bulletins.



The temperature that kills 10% and 90% of sweet cherry buds after 30 minutes, by bud stage. Buds grow more tender as they open, so the same frost does more harm later in spring.

Bud stage	10% killed	90% killed	Between 90% and 10% killed	Date reached this year
Bud swell	17°F −8°C	5°F −15°C		
Side green	22°F −6°C	9°F −13°C		
Green tip	25°F −4°C	14°F −10°C		
Tight cluster	26°F −3°C	17°F −8°C		
Open cluster	27°F −3°C	21°F −6°C		
First white	27°F −3°C	24°F −4°C		
First bloom	28°F −2°C	25°F −4°C		
Full bloom	28°F −2°C	25°F −4°C		
Post bloom	28°F −2°C	25°F −4°C		



Reading the chart. At the 10% figure about one bud in ten is killed after 30 minutes of cold; at the 90% figure, about nine in ten. A blank cell (—) means the published table gives no figure for that stage. °C figures are conversions, rounded.

Cold-night log

Date	Low (°F)	Bud stage	What you saw afterwards

Source: Michigan State University Extension compilation of the WSU and MSU critical-temperature bulletins

Data as of 15 Nov 2026