

Fruit Crop Phenology Model Output Data for Feb. 10, 2012 (program uses CoAgMet temperature data, drops overnight low, & backs up date by one day). Arrow indicates field observed stage. For information, contact: WCRC—OM, Grand Junction, CO. Phone: 970-434-3264

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Location: **WCRC - Orchard Mesa**, [Mesa Co.] Colo. Observation Date: Feb. 9, 2012

Crop: APRICOT		Cultivar: Tilton	Deviation From Normal: -9 days			
Chill Units (CU) Accumulated: 724			Growing Degree Hours Accumulated: 609			
Calculated Stage of Development: 0.64			Spring T50 temperature (Model): 0 °F			
		Req'd.		Calculated or	Estimated	
		(CU) /	Normal	Predicted (*)	Critical Temperatures	
<u>Stage</u>	<u>Description</u>	<u>GDH</u>	<u>Date</u>	<u>Dates</u>	<u>T10</u>	<u>T90</u>
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(720)	Dec. 23	Dec. 12		
1	First Swell	949	Feb. 27	Feb. 18*	15°F	--
2	Tip Separates	1,444	Mar. 9	Feb. 28*	20°F	0°F
3	Red Calyx	2,122	Mar. 17	Mar. 7*	22°F	9°F
4	First White	3,039	Mar. 26	Mar. 16*	24°F	14°F
5	First Bloom	3,533	Mar. 30	Mar. 20*	24°F	19°F
6	Full Bloom	4,111	Apr. 4	Mar. 25*	25°F	22°F
7	In The Shuck	5,217	Apr. 12	Apr. 2*	27°F	24°F
8	First Green	6,828	Apr. 22	Apr. 12*	28°F	25°F
9	Fruit Growth					

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

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Crop: PRUNE PLUM		Cultivar: Italian	Deviation From Normal: -10 Days			
Chill Units (CU) Accumulated: 790			Growing Degree Hours Accumulated: 599			
Calculated Stage of Development: 0.24			Spring T50 temperature (Model): 0 °F			
		Req'd.		Calculated or	Estimated	
		(CU) /	Normal	Predicted (*)	Critical Temperatures	
<u>Stage</u>	<u>Description</u>	<u>GDH</u>	<u>Date</u>	<u>Dates</u>	<u>T10</u>	<u>T90</u>
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(788)	Jan. 4	Dec. 18		
1	First Swell	2,533	Mar. 22	Mar. 11*	14°F	0°F
2	Side White	3,056	Mar. 27	Mar. 16*	17°F	3°F
3	Tip Green	3,623	Apr. 1	Mar. 21*	20°F	7°F
4	Tight Cluster	4,489	Apr. 7	Mar. 27*	24°F	16°F
5	First White	5,417	Apr. 13	Apr. 2*	26°F	22°F
6	First Bloom	5,684	Apr. 15	Apr. 4*	27°F	23°F
7	Full bloom	6,412	Apr. 19	Apr. 8*	28°F	23°F
8	Fruit Growth				28°F	23°F

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

Date: 2/9/2012

Crop: PEACH Cultivar: Elberta  
 Chill Units (CU) Accumulated: 803  
 Calculated Stage of Development: 0.27

Deviation From Normal: -10 Days  
 Growing Degree Hours Accumulated: 590  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(800)	Jan. 8	Dec. 19		
1	First Swell	2,196	Mar. 19	Mar. 8*	18°F	1°F
2	Calyx Green	2,662	Mar. 23	Mar. 12*	20°F	6°F
3	Calyx Red	3,169	Mar. 28	Mar. 17*	24°F	15°F
4	First Pink	3,729	Apr. 1	Mar. 21*	25°F	19°F
5	First Bloom	4,365	Apr. 6	Mar. 26*	26°F	21°F
6	Full Bloom	5,116	Apr. 11	Mar. 31*	27°F	24°F
7	Post Bloom	6,089	Apr. 17	Apr. 6*	28°F	25°F
8	Fruit Growth				28°F	25°F

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

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Crop: PEACH Cultivar: Redhaven  
 Chill Units (CU) Accumulated: 879  
 Calculated Stage of Development: 0.35

Deviation From Normal: -11 Days  
 Growing Degree Hours Accumulated: 553  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(870)	Jan. 19	Dec. 31		
1	First Swell	1,592	Mar. 12	Feb. 29*	18°F	1°F
2	Calyx Green	2,449	Mar. 22	Mar. 10*	20°F	6°F
3	Calyx Red	3,193	Mar. 29	Mar. 17*	24°F	15°F
4	First Pink	3,860	Apr. 3	Mar. 22*	25°F	19°F
5	First Bloom	4,470	Apr. 8	Mar. 27*	26°F	21°F
6	Full Bloom	5,036	Apr. 11	Mar. 30*	27°F	24°F
7	Post Bloom	5,565	Apr. 14	Apr. 2*	28°F	25°F
8	Fruit Growth				28°F	25°F

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

Date: 2/9/2012

Crop: Sweet CHERRY Cultivar: Bing  
 Chill Units (CU) Accumulated: 889.5  
 Calculated Stage of Development: 0.23

Deviation From Normal: -11 Days  
 Growing Degree Hours Accumulated: 550  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(880)	Jan. 20	Jan. 1		
1	First Swell	2,356	Mar. 21	Mar. 9*	17°F	5°F
2	Side Green	2,683	Mar. 24	Mar. 12*	22°F	9°F
3	Green Tip	3,533	Mar. 31	Mar. 19*	25°F	14°F
4	Tight Cluster	4,050	Apr. 5	Mar. 24*	26°F	17°F
5	Open Cluster	4,417	Apr. 7	Mar. 26*	27°F	21°F
6	First White	4,661	Apr. 9	Mar. 28*	27°F	24°F
7	First Bloom	5,328	Apr. 13	Apr. 1*	28°F	25°F
8	Full Bloom	6,172	Apr. 18	Apr. 6*	28°F	25°F
9	Post Bloom	7,528	Apr. 26	Apr. 14*	28°F	25°F
10	Fruit Growth				28°F	25°F

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

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Crop: Tart CHERRY Cv. Montmorency  
 Chill Units (CU) Accumulated: 953  
 Calculated Stage of Development: 0.28

Deviation From Normal: -12 Days  
 Growing Degree Hours Accumulated: 485  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(950)	Jan. 28	Jan. 6		
1	First Swell	1,703	Mar. 15	Mar. 2*	15°F	0°F
2	Side Green	2,327	Mar. 22	Mar. 9*	24°F	10°F
3	Green Tip	2,988	Mar. 28	Mar. 15*	26°F	22°F
4	Tight Cluster	3,690	Apr. 2	Mar. 20*	26°F	24°F
5	Open Cluster	4,446	Apr. 8	Mar. 26*	28°F	24°F
6	First White	5,267	Apr. 13	Mar. 31*	28°F	24°F
7	First Bloom	6,176	Apr. 18	Apr. 5*	28°F	24°F
8	Full Bloom	7,208	Apr. 25	Apr. 12*	28°F	25°F
9	Post Bloom	8,433	May 1	Apr. 18*	28°F	25°F
10	Fruit Growth				28°F	25°F

<sup>1</sup> Critical temperatures from researchers at Michigan State University, and mortality is based on 30 min. exposure to that temperature.

Date: 2/9/2012

Crop: PEAR Cultivar: Bartlett  
 Chill Units (CU) Accumulated: 1,216  
 Calculated Stage of Development: 0.11

Deviation From Normal: -18 Days  
 Growing Degree Hours Accumulated: 196  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(1,210)	Feb. 22	Jan. 27		
1	Scale Separation	1,794	Mar. 22	Mar. 3*	15°F	0°F
2	Blsm Buds Exposed	2,722	Mar. 30	Mar. 11*	20°F	6°F
3	Tight Cluster	3,128	Apr. 2	Mar. 14*	24°F	15°F
4	First White	4,244	Apr. 10	Mar. 22*	25°F	19°F
5	Full White	4,750	Apr. 13	Mar. 25*	26°F	22°F
6	First Bloom	5,044	Apr. 15	Mar. 27*	27°F	23°F
7	Full Bloom	5,644	Apr. 18	Mar. 30*	28°F	24°F
8	Post Bloom	6,817	Apr. 25	Apr. 6*	28°F	24°F
9	Fruit Growth				28°F	24°F

<sup>1</sup> Critical temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.

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Crop: APPLE Cultivar: (red) Delicious  
 Chill Units (CU) Accumulated: 1,237  
 Calculated Stage of Development: 0.09

Deviation From Normal: -19 Days  
 Growing Degree Hours Accumulated: 187  
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 7	Oct. 5		
→	Rest Completion	(1,234)	Feb. 24	Jan. 29		
1	Silver Tip	2,061	Mar. 25	Mar. 5*	15°F	2°F
2	Green Tip	2,544	Mar. 29	Mar. 9*	18°F	10°F
3	1/2 in. Green Tip	3,100	Apr. 2	Mar. 13*	23°F	15°F
4	Tight Cluster	3,939	Apr. 9	Mar. 20*	27°F	21°F
5	First Pink	4,856	Apr. 14	Mar. 25*	28°F	24°F
6	Full Pink	5,394	Apr. 17	Mar. 28*	28°F	25°F
7	First Bloom	6,172	Apr. 22	Apr. 2*	28°F	25°F
8	Full Bloom	6,933	Apr. 26	Apr. 6*	28°F	25°F
9	Fruit Growth				28°F	25°F

<sup>1</sup> For red Delicious. Critical temperatures prior to petal fall are approx. 1° lower for Golden Delicious and Winesap and approx. 2° lower for Rome Beauty. All varieties are equally tender after petal fall. Temperatures from Wash. St. Univ. researchers, Prosser, WA (1964-76) and are based on 30 min. exposure to that temperature.