

Fruit Crop Phenology Model Output Data for Feb. 10, 2012 (program uses CoAgMet temperatures, drops overnight low, & backs up date by one day). Normal dates are calculated from 46 year weather data. Arrow indicates probable field stage. For information, contact: WCRC—OM, Grand Junction, CO. Phone: 970-434-3264.

Location: Cedaredge , [Delta Co.] Colo.			Observation Date: Feb. 9, 2012			
Crop: APRICOT Cultivar: Tilton			Deviation from normal: -26 days			
CU Accumulated: 721.5			Growing Degree Hours Accumulated: 487			
Calculated Stage of Development: 0.51			Spring T50 temperature (Model): 0 °F			
		Req'd.		Calculated or	Estimated Critical	
		(CU) /	Normal	Predicted (*)	Temperatures	
Stage	Description	GDH	Date	Date	T10	T90
	Begin CU Accum.		Sept. 30	Oct. 5		
→	Rest Completion	(720)	Dec. 4	Dec. 12		
1	First Swell	949	Mar. 18	Feb. 20*	15°F	--
2	Tip Separates	1,444	Mar. 26	Feb. 28*	20°F	0°F
3	Red Calyx	2,122	Apr. 5	Mar. 9*	22°F	9°F
4	First White	3,039	Apr. 13	Mar. 17*	24°F	14°F
5	First Bloom	3,533	Apr. 17	Mar. 21*	25°F	19°F
6	Full Bloom	4,111	Apr. 21	Mar. 25*	27°F	22°F
7	In The Shuck	5,217	Apr. 29	Apr. 2*	27°F	24°F
8	First Green	6,928	May 8	Apr. 11*	28°F	25°F
9	Fruit Growth					

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

Crop: PRUNE PLUM Cultivar: Italian			Deviation from normal: -24 days			
CU Accumulated: 794			Growing Degree Hours Accumulated: 426			
Calculated Stage of Development: 0.17			Spring T50 temperature (Model): 0 °F			
		Req'd.		Calculated or	Estimated Critical	
		(CU) /	Normal	Predicted (*)	Temperatures	
Stage	Description	GDH	Date	Date	T10	T90
	Begin CU Accum.		Sept. 30	Oct. 5		
→	Rest Completion	(788)	Dec. 13	Dec. 20		
1	First Swell	2,533	Apr. 9	Mar. 15*	14°F	0°F
2	Side White	3,056	Apr. 14	Mar. 20*	17°F	3°F
3	Tip Green	3,623	Apr. 18	Mar. 24*	20°F	7°F
4	Tight Cluster	4,489	Apr. 24	Mar. 30*	24°F	16°F
5	First White	5,417	Apr. 30	Apr. 5*	26°F	22°F
6	First Bloom	5,684	May 2	Apr. 7*	27°F	23°F
7	Full bloom	6,412	May 6	Apr. 11*	28°F	23°F
8	Fruit Growth				28°F	23°F

¹ 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
 CU Accumulated: 804.5
 Calculated Stage of Development: 0.19

Deviation from normal: -24 days
 Growing Degree Hours Accumulated: 426
 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.		Sept. 30	Oct. 4		
→	Rest Completion	(800)	Dec. 14	Dec. 22		
1	First Swell	2,196	Apr. 5	Mar. 11*	18°F	1°F
2	Calyx Green	2,662	Apr. 10	Mar. 16*	21°F	5°F
3	Calyx Red	3,169	Apr. 14	Mar. 20*	23°F	9°F
4	First Pink	3,729	Apr. 19	Mar. 25*	25°F	15°F
5	First Bloom	4,365	Apr. 23	Mar. 29*	26°F	21°F
6	Full Bloom	5,116	Apr. 28	Apr. 3*	27°F	24°F
7	Post Bloom	6,089	May 4	Apr. 9*	28°F	25°F
8	Fruit Growth				28°F	25°F

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

Crop: PEACH Cultivar: Redhaven
 CU Accumulated: 871
 Calculated Stage of Development: 0.26

Deviation from normal: -24 days
 Growing Degree Hours Accumulated: 406
 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.		Sept 30	Oct. 5		
→	Rest Completion	(870)	Dec. 26	Jan. 1		
1	First Swell	1,592	Mar. 29	Mar. 4*	18°F	1°F
2	Calyx Green	2,449	Apr. 8	Mar. 14*	21°F	5°F
3	Calyx Red	3,193	Apr. 15	Mar. 21*	23°F	9°F
4	First Pink	3,860	Apr. 20	Mar. 26*	25°F	15°F
5	First Bloom	4,470	Apr. 24	Mar. 30*	26°F	21°F
6	Full Bloom	5,036	Apr. 28	Apr. 3*	27°F	24°F
7	Post Bloom	5,565	May 1	Apr. 6*	28°F	25°F
8	Fruit Growth				28°F	25°F

¹ 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
 CU Accumulated: 882
 Calculated Stage of Development: 0.23

Deviation from normal: -23 days
 Growing Degree Hours Accumulated: 390
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10	T90
	Begin CU Accum.		Sept 30	Oct. 5		
→	Rest Completion	(880)	Dec. 28	Jan. 2		
1	First Swell	2,356	Apr. 7	Mar. 14*	17°F	5°F
2	Side Green	2,683	Apr. 10	Mar. 17*	22°F	9°F
3	Green Tip	3,533	Apr. 17	Mar. 24*	25°F	14°F
4	Tight Cluster	4,050	Apr. 21	Mar. 28*	26°F	17°F
5	Open Cluster	4,417	Apr. 23	Mar. 30*	27°F	21°F
6	First White	4,661	Apr. 25	Apr. 1*	27°F	24°F
7	First Bloom	5,328	Apr. 30	Apr. 6*	28°F	25°F
8	Full Bloom	6,172	May 5	Apr. 11*	28°F	25°F
9	Post Bloom	7,528	May 12	Apr. 18*	28°F	25°F
10	Fruit Growth				28°F	25°F

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

Crop: Tart CHERRY Cv. Montmorency
 CU Accumulated: 954.5
 Calculated Stage of Development: 0.17

Deviation from normal: -18 days
 Growing Degree Hours Accumulated: 287
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10	T90
	Begin CU Accum.		Sept. 30	Oct. 5		
→	Rest Completion	(950)	Jan. 12	Jan. 8		
1	First Swell	1,703	Mar. 31	Mar. 12*	15°F	0°F
2	Side Green	2,327	Apr. 7	Mar. 19*	24°F	10°F
3	Green Tip	2,988	Apr. 13	Mar. 25*	26°F	22°F
4	Tight Cluster	3,690	Apr. 18	Mar. 30*	26°F	24°F
5	Open Cluster	4,446	Apr. 24	Apr. 5*	28°F	24°F
6	First White	5,267	Apr. 29	Apr. 10*	28°F	24°F
7	First Bloom	6,176	May 5	Apr. 16*	28°F	24°F
8	Full Bloom	7,208	May 10	Apr. 21*	28°F	25°F
9	Post Bloom	8,433	May 16	Apr. 27*	28°F	25°F
10	Fruit Growth				28°F	25°F

¹ 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
 CU Accumulated: 1,215.5
 Calculated Stage of Development: 0.003

Deviation from normal: -5 days
 Growing Degree Hours Accumulated: 6
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10	T90
	Begin CU Accum.		Sept. 30	Oct. 7		
→	Rest Completion	(1,210)	Feb. 13	Feb. 3		
1	Scale Separation	1,794	Apr. 2	Mar. 27*	15°F	0°F
2	Blsm Buds Exposed	2,722	Apr. 11	Apr. 5*	20°F	6°F
3	Tight Cluster	3,128	Apr. 15	Apr. 9*	24°F	15°F
4	First White	4,244	Apr. 23	Apr. 17*	25°F	19°F
5	Full White	4,750	Apr. 26	Apr. 20*	26°F	22°F
6	First Bloom	5,044	Apr. 28	Apr. 22*	27°F	23°F
7	Full Bloom	5,644	May 2	Apr. 26*	28°F	24°F
8	Post Bloom	6,817	May 8	May 2*	28°F	24°F
9	Fruit Growth				28°F	24°F

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

Crop: APPLE Cultivar: (red) Delicious
 CU Accumulated: 1,242
 Calculated Stage of Development: 0.001

Deviation from normal: -7 days
 Growing Degree Hours Accumulated: 2
 Spring T50 temperature (Model): 0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10	T90
	Begin CU Accum.		Sept. 30	Oct. 5		
→	Rest Completion	(1,234)	Feb. 15	Feb. 6		
1	Silver Tip	2,061	Apr. 5	Mar. 28*	15°F	2°F
2	Green Tip	2,544	Apr. 10	Apr. 2*	18°F	10°F
3	1/2 in. Green Tip	3,100	Apr. 15	Apr. 7*	23°F	15°F
4	Tight Cluster	3,939	Apr. 21	Apr. 13*	27°F	21°F
5	First Pink	4,856	Apr. 27	Apr. 19*	28°F	24°F
6	Full Pink	5,394	May 1	May 23*	28°F	25°F
7	First Bloom	6,172	May 5	May 27*	28°F	25°F
8	Full Bloom	6,933	May 9	May 1*	28°F	25°F
9	Fruit Growth				28°F	25°F

¹ 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.