

Fruit Crop Phenology Model Output Data for Mar.23, 2012 (program uses CoAgMet temperatures, drops overnight low, & backs up date by one day). Normal dates were calculated using 20 yr ave. temperatures. Arrow indicates field observed/possible stage For information, contact: WCRC—OM, Grand Junction, CO. Phone: 970-434-3264.

Location: **WCRC - Rogers Mesa**, [Delta Co.] Colo. Observation Date: March 23, 2012

Crop: APRICOT		Cultivar: Tilton	Deviation From Normal: -21 days			
CU Required / Accumulated: 721			Growing Degree Hours Accumulated 2659			
Calculated Stage of Development: 3.59			Spring T50 temperature (Model): 18.2 °F			
		Req'd		Calculated or	Estimated	
		(CU) /	Normal	Predicted (*)	Critical Temperatures	
Stage	Description	GDH	Date	Date	T10	T90
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(720)	Dec. 7	Dec. 21		
1	First Swell	949	Mar. 17	Feb. 27	15°F	--
2	Tip Separates	1,444	Mar. 24	Mar. 9	20°F	0°F
→ 3	Red Calyx	2,122	Apr. 4	Mar. 14*	22°F	9°F
4	First White	3,039	Apr. 14	Mar. 24*	24°F	14°F
5	First Bloom	3,533	Apr. 18	Mar. 28*	25°F	19°F
6	Full Bloom	4,111	Apr. 23	Apr. 2*	27°F	22°F
7	In The Shuck	5,217	May 1	Apr. 10*	27°F	24°F
8	First Green	6,828	May 10	Apr. 19*	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: -20 days			
CU Required / Accumulated: 790			Growing Degree Hours Accumulated: 2583			
Calculated Stage of Development: 1.96			Spring T50 temperature (Model): 7.2 °F			
		Req'd		Calculated or	Estimated	
		(CU) /	Normal	Predicted (*)	Critical Temperatures	
Stage	Description	GDH	Date	Date	T10	T90
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(788)	Dec. 14	Jan. 3		
→ 1	First Swell	2,533	Apr. 9	Mar. 20	14°F	0°F
2	Side White	3,056	Apr. 15	Mar. 26*	17°F	3°F
3	Tip Green	3,633	Apr. 19	Mar. 30*	20°F	7°F
4	Tight Cluster	4,489	Apr. 26	Apr. 6*	24°F	16°F
5	First White	5,417	May 2	Apr. 12*	26°F	22°F
6	First Bloom	5,684	May 4	Apr. 14*	27°F	23°F
7	Full bloom	6,412	May 8	Apr. 18*	28°F	23°F
8	Fruit Growth				28°F	23°F

Date: 3/23/2012

Crop: PEACH Cultivar: Elberta
 CU Accumulated: 807.5
 Calculated Stage of Development: 1.81

Deviation From Normal: -20 days
 Growing Degree Hours Accumulated: 2573
 Spring T50 temperature (Model): 12.2 °F

Stage	Description	Req'd. (CU)/ GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(800)	Dec. 15	Jan. 5		
→ 1	First Swell	2,196	Apr. 5	Mar. 15	18°F	1°F
2	Calyx Green	2,662	Apr. 10	Mar. 21*	21°F	5°F
3	Calyx Red	3,169	Apr. 16	Mar. 27*	23°F	9°F
4	First Pink	3,729	Apr. 20	Mar. 31*	25°F	15°F
5	First Bloom	4,365	Apr. 25	Apr. 5*	26°F	21°F
6	Full Bloom	5,116	Apr. 30	Apr. 10*	27°F	24°F
7	Post Bloom	6,089	May 6	Apr. 16*	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: 872.5
 Calculated Stage of Development: 2.13

Deviation From Normal: -20 days
 Growing Degree Hours Accumulated: 2544
 Spring T50 temperature (Model): 13.2 °F

Stage	Description	Req'd/ (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(870)	Dec. 26	Jan. 14		
→ 1	First Swell	1,952	Mar. 27	Mar. 12*	18°F	1°F
2	Calyx Green	2,449	Apr. 8	Mar. 20	21°F	5°F
3	Calyx Red	3,193	Apr. 16	Mar. 27*	23°F	9°F
4	First Pink	3,860	Apr. 21	Apr. 1*	25°F	15°F
5	First Bloom	4,470	Apr. 26	Apr. 6*	26°F	21°F
6	Full Bloom	5,036	Apr. 30	Apr. 10*	27°F	24°F
7	Post Bloom	5,565	May 3	Apr. 13*	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: 3/23/2012

Crop: Sweet CHERRY Cultivar: Bing
 CU Accumulated: 882.5
 Calculated Stage of Development: 1.53

Deviation From Normal: -20 days
 Growing Degree Hours Accumulated: 2528
 Spring T50 temperature (Model): 12.09 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(880)	Dec. 29	Jan. 15		
→ 1	First Swell	2,356	Apr. 7	Mar. 17	17°F	5°F
2	Side Green	2,683	Apr. 11	Mar. 22	22°F	9°F
3	Green Tip	3,533	Apr. 18	Mar. 29*	25°F	14°F
4	Tight Cluster	4,050	Apr. 22	Apr. 2*	26°F	17°F
5	Open Cluster	4,417	Apr. 25	Apr. 5*	27°F	21°F
6	First White	4,661	Apr. 27	Apr. 7*	27°F	24°F
7	First Bloom	5,328	May 2	Apr. 12*	28°F	25°F
8	Full Bloom	6,172	May 7	Apr. 17*	28°F	25°F
9	Post Bloom	7,528	May 14	Apr. 24*	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: 958
 Calculated Stage of Development: 2.02

Deviation From Normal: -18 days
 Growing Degree Hours Accumulated: 2340
 Spring T50 temperature (Model): 17.0 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(950)	Jan. 12	Jan. 21		
→ 1	First Swell	1,703	Mar. 29	Mar. 14	15°F	0°F
2	Side Green	2,327	Apr. 7	Mar. 20	24°F	10°F
3	Green Tip	2,988	Apr. 14	Mar. 27*	26°F	22°F
4	Tight Cluster	3,690	Apr. 19	Apr. 1*	26°F	24°F
5	Open Cluster	4,446	Apr. 25	Apr. 7*	28°F	24°F
6	First White	5,267	May 1	Apr. 13*	28°F	24°F
7	First Bloom	6,176	May 7	Apr. 19*	28°F	24°F
8	Full Bloom	7,208	May 12	Apr. 24*	28°F	25°F
9	Post Bloom	8,433	May 17	Apr. 29*	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: 3/23/2012

Crop: PEAR Cultivar: Bartlett
 CU Accumulated: 1,177
 Calculated Stage of Development: 1.35

Deviation From Normal: -16 days
 Growing Degree Hours Accumulated: 2126
 Spring T50 temperature (Model): 9.3 °F

Stage	Description	Req'd. (CU)/ GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(1,210)	Feb. 16	Feb. 12		
→ 1	Scale Separation	1,794	Mar. 31	Mar. 16	15°F	0°F
2	Blsm Buds Exposed	2,722	Apr. 11	Mar. 26*	20°F	6°F
3	Tight Cluster	3,128	Apr. 16	Mar. 31*	24°F	15°F
4	First White	4,244	Apr. 24	Apr. 8*	25°F	19°F
5	Full White	4,750	Apr. 28	Apr. 12*	26°F	22°F
6	First Bloom	5,044	Apr. 30 1	Apr. 14*	27°F	23°F
7	Full Bloom	5,644	May 4	Apr. 18*	28°F	24°F
8	Post Bloom	6,817	May 11	Apr. 25*	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: 1241
 Calculated Stage of Development: 1.09

Deviation From Normal: -16 days
 Growing Degree Hours Accumulated 2106
 Spring T50 temperature (Model): 10.2 °F

Stage	Description	Req'd. (CU)/ GDH	Normal Date	Calculated or Predicted (*) Date	Estimated Critical Temperatures ¹ T10 T90	
	Begin CU Accum.		Oct. 4	Oct. 4		
	Rest Completion	(1,234)	Feb. 18	Feb. 13		
→ 1	Silver Tip	2,061	Apr. 4	Mar. 20	15°F	2°F
2	Green Tip	2,544	Apr. 12	Mar. 25*	18°F	10°F
3	1/2 in. Green Tip	3,100	Apr. 16	Mar. 31*	23°F	15°F
4	Tight Cluster	3,939	Apr. 22	Apr. 6*	27°F	21°F
5	First Pink	4,856	Apr. 29	Apr. 13*	28°F	24°F
6	Full Pink	5,394	May 3	Apr. 17*	28°F	25°F
7	First Bloom	6,172	May 7	Apr. 21*	28°F	25°F
8	Full Bloom	6,933	May 11	Apr. 25*	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.