Fruit Crop Phenology Model Output Data for May 1, 2008 (program drops overnight low & backs up date by one day). Normal dates are calculated from 30 year weather data. Observed dates are based on 2007-08 temperatures. For information, contact: Dr. Harold Larsen, WCRC—OM, Grand Junction, CO
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Location: **Cedaredge**, [Delta Co.] Colo. Observation Date: Apr. 30, 2008
Crop: APRICOT Cultivar: Tilton Deviation from normal: 2 days
CU Accumulated: 729 Growing Degree Hours Accumulated: 5092
Calculated Stage of Development: 6 Spring T50 temperature (Model): 26 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures T10	T90
	Begin CU Accum.		Sept. 30	Sept. 30		
	Rest Completion	(720)	Dec. 5	Jan. 6		
1	First Swell	949	Mar. 15	Mar. 21	15°F	--
2	Tip Separates	1,444	Mar. 24	Mar. 26	20°F	0°F
3	Red Calyx	2,122	Apr. 3	Apr. 3	22°F	9°F
4	First White	3,039	Apr. 12	Apr. 16	24°F	14°F
5	First Bloom	3,533	Apr. 16	Apr. 21	25°F	19°F
→ 6	Full Bloom	4,111	Apr. 21	Apr. 23	27°F	22°F
7	In The Shuck	5,217	Apr. 28	May 1*	27°F	24°F
8	First Green	6,928	May 6	May 10*	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.

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Crop: PRUNE PLUM Cultivar: Italian Deviation from normal: 4 days
CU Accumulated: 789 Growing Degree Hours Accumulated: 5083
Calculated Stage of Development: 4 Spring T50 temperature (Model): 23 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures T10	T90
	Begin CU Accum.		Sept. 30	Sept. 30		
	Rest Completion	(788)	Dec. 14	Jan. 24		
1	First Swell	2,533	Apr. 7	Apr. 13	14°F	0°F
2	Side White	3,056	Apr. 12	Apr. 17	17°F	3°F
3	Tip Green	3,623	Apr. 17	Apr. 22	20°F	7°F
→ 4	Tight Cluster	4,489	Apr. 23	Apr. 28	24°F	16°F
5	First White	5,417	Apr. 29	May 2*	26°F	22°F
6	First Bloom	5,684	May 1	May 4*	27°F	23°F
7	Full bloom	6,412	May 4	May 8*	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: 4/30/2008

Crop: PEACH Cultivar: Elberta
CU Accumulated: 808
Calculated Stage of Development: 6

Deviation from normal: 3 days
Growing Degree Hours Accumulated: 5081
Spring T50 temperature (Model): 26 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures T10	T90
	Begin CU Accum.		Sept. 30	Sept. 30		
	Rest Completion	(800)	Dec. 15	Jan. 26		
1	First Swell	2,196	Apr. 4	Apr. 4	18°F	1°F
2	Calyx Green	2,662	Apr. 9	Apr. 14	21°F	5°F
3	Calyx Red	3,169	Apr. 13	Apr. 19	23°F	9°F
4	First Pink	3,729	Apr. 18	Apr. 23	25°F	15°F
5	First Bloom	4,365	Apr. 23	Apr. 26	26°F	21°F
→ 6	Full Bloom	5,116	Apr. 28	Apr. 30	27°F	24°F
7	Post Bloom	6,089	May 2	May 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.

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Crop: PEACH Cultivar: Redhaven
CU Accumulated: 881
Calculated Stage of Development: 6

Deviation from normal: 3 days
Growing Degree Hours 5037
Spring T50 temperature (Model): 26 °F

Stage	Description	Req'd (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures T10	T90
	Begin CU Accum.		Sept 30	Sept. 30		
	Rest Completion	(870)	Dec. 28	Feb. 11		
1	First Swell	1,592	Mar. 27	Mar. 28	18°F	1°F
2	Calyx Green	2,449	Apr. 6	Apr. 12	21°F	5°F
3	Calyx Red	3,193	Apr. 14	Apr. 19	23°F	9°F
4	First Pink	3,860	Apr. 19	Apr. 23	25°F	15°F
5	First Bloom	4,470	Apr. 23	Apr. 28	26°F	21°F
→ 6	Full Bloom	5,036	Apr. 27	Apr. 30	27°F	24°F
7	Post Bloom	5,565	Apr. 29	May 3*	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: 4/30/2008

Crop: Sweet CHERRY Cultivar: Bing
CU Accumulated: 881
Calculated Stage of Development: 6

Deviation from normal: 4 days
Growing Degree Hours Accumulated: 5033
Spring T50 temperature (Model): 26 °F

	Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures[1] T10	T90
		Begin CU Accum.		Sept 30	Sept. 30		
		Rest Completion	(880)	Dec. 30	Feb. 11		
	1	First Swell	2,356	Apr. 5	Apr. 8	17°F	5°F
	2	Side Green	2,683	Apr. 9	Apr. 14	22°F	9°F
	3	Green Tip	3,533	Apr. 16	Apr. 21	25°F	14°F
	4	Tight Cluster	4,050	Apr. 20	Apr. 23	26°F	17°F
	5	Open Cluster	4,417	Apr. 23	Apr. 28	27°F	21°F
→	6	First White	4,661	Apr. 25	Apr. 29	27°F	24°F
	7	First Bloom	5,328	Apr. 29	May 2*	28°F	25°F
	8	Full Bloom	6,172	May 4	May 7*	28°F	25°F
	9	Post Bloom	7,528	May 10	May 14*	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.

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Crop: Tart CHERRY Cv. Montmorency
CU Accumulated: 951
Calculated Stage of Development: 5

Deviation from normal: 5 days
Growing Degree Hours Accumulated: 4961
Spring T50 temperature (Model): 26 °F

	Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures[1] T10	T90
		Begin CU Accum.		Sept. 30	Sept. 30		
		Rest Completion	(950)	Jan. 13	Feb. 17		
	1	First Swell	1,703	Mar. 28	Mar. 30	15°F	0°F
	2	Side Green	2,327	Apr. 5	Apr. 9	24°F	10°F
	3	Green Tip	2,988	Apr. 12	Apr. 18	26°F	22°F
	4	Tight Cluster	3,690	Apr. 18	Apr. 23	26°F	24°F
→	5	Open Cluster	4,446	Apr. 23	Apr. 28	28°F	24°F
	6	First White	5,267	Apr. 29	May 2*	28°F	24°F
	7	First Bloom	6,176	May 4	May 8*	28°F	24°F
	8	Full Bloom	7,208	May 9	May 13*	28°F	25°F
	9	Post Bloom	8,433	May 14	May 18*	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: 4/30/2008

Crop: PEAR Cultivar: Bartlett
CU Accumulated: 1,212
Calculated Stage of Development: 4

Deviation from normal: 7 days
Growing Degree Hours Accumulated: 4522
Spring T50 temperature (Model): 24 °F

Stage	Description	Req'd.. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures[1] T10	T90
	Begin CU Accum.		Sept. 30	Sept. 30		
	Rest Completion	(1,210)	Feb. 14	Mar. 10		
1	Scale Separation	1,794	Mar. 30	Apr. 7	15°F	0°F
2	Blsm Buds Exposed	2,722	Apr. 10	Apr. 19	20°F	6°F
3	Tight Cluster	3,128	Apr. 14	Apr. 22	24°F	15°F
→ 4	First White	4,244	Apr. 22	Apr. 29	25°F	19°F
5	Full White	4,750	Apr. 26	May 2*	26°F	22°F
6	First Bloom	5,044	Apr. 27	May 4*	27°F	23°F
7	Full Bloom	5,644	May 1	May 8*	28°F	24°F
8	Post Bloom	6,817	May 7	May 15*	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.

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Crop: APPLE Cultivar: (red) Delicious
CU Accumulated: 1,242
Calculated Stage of Development: 4

Deviation from normal: 8 days
Growing Degree Hours Accumulated: 4435
Spring T50 temperature (Model): 25 °F

Stage	Description	Req'd. (CU) / GDH	Normal Date	Observed or Estimated (*) Date	Estimated Critical Temperatures[1] T10	T90
	Begin CU Accum.		Sept. 30	Sept. 30		
	Rest Completion	(1,234)	Feb. 18	Mar. 12		
1	Silver Tip	2,061	Apr. 3	Apr. 14	15°F	2°F
2	Green Tip	2,544	Apr. 8	Apr. 19	18°F	10°F
3	1/2 in. Green Tip	3,100	Apr. 13	Apr. 23	23°F	15°F
→ 4	Tight Cluster	3,939	Apr. 20	Apr. 28	27°F	21°F
5	First Pink	4,856	Apr. 26	May 3*	28°F	24°F
6	Full Pink	5,394	Apr. 30	May 7*	28°F	25°F
7	First Bloom	6,172	May 4	May 11*	28°F	25°F
8	Full Bloom	6,933	May 7	May 15*	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.