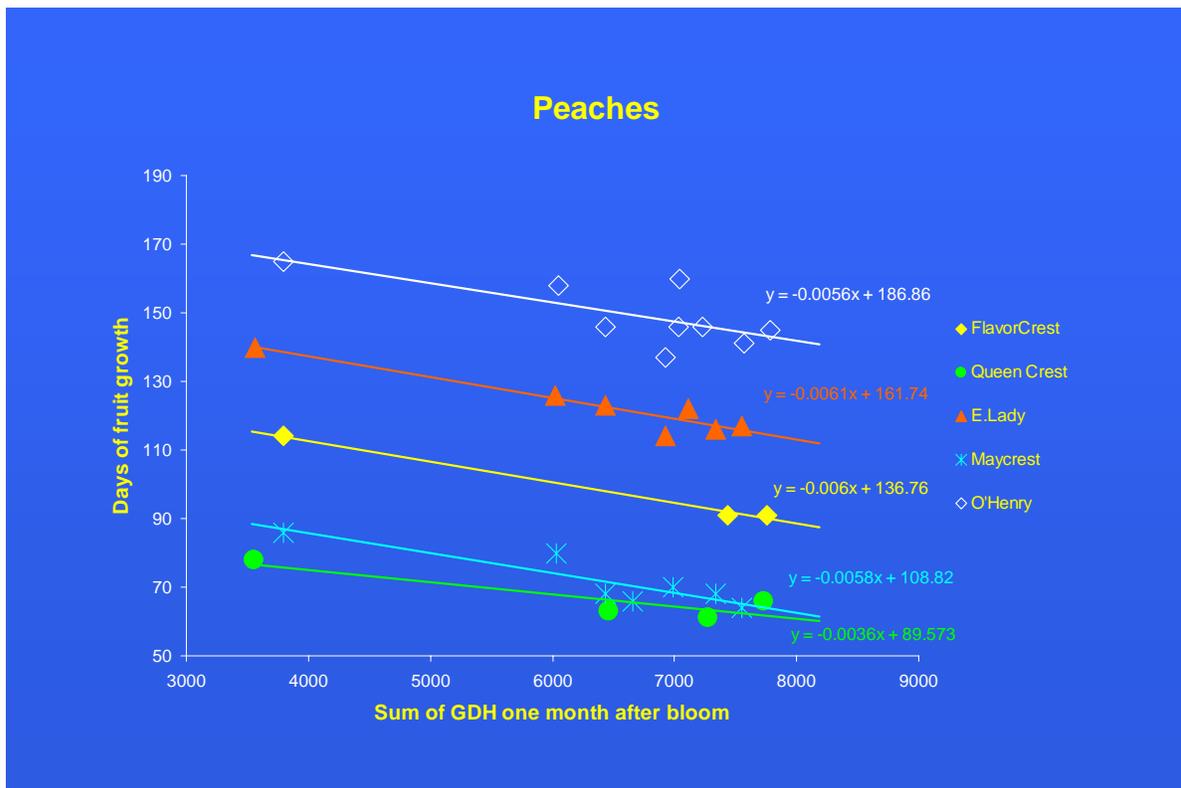


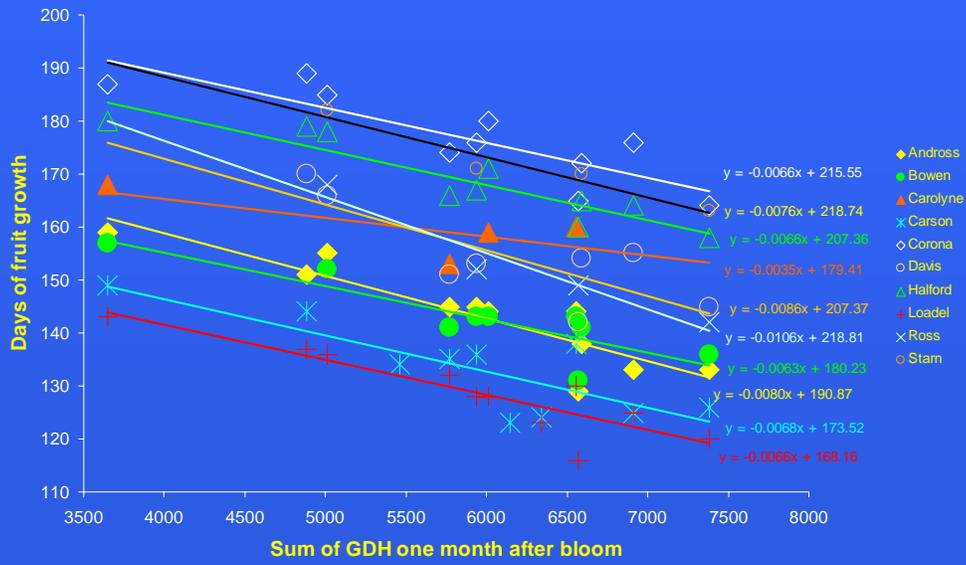
Using Spring Weather Data to Predict Harvest Date and Sizing Potential for Peaches Nectarines and Plums

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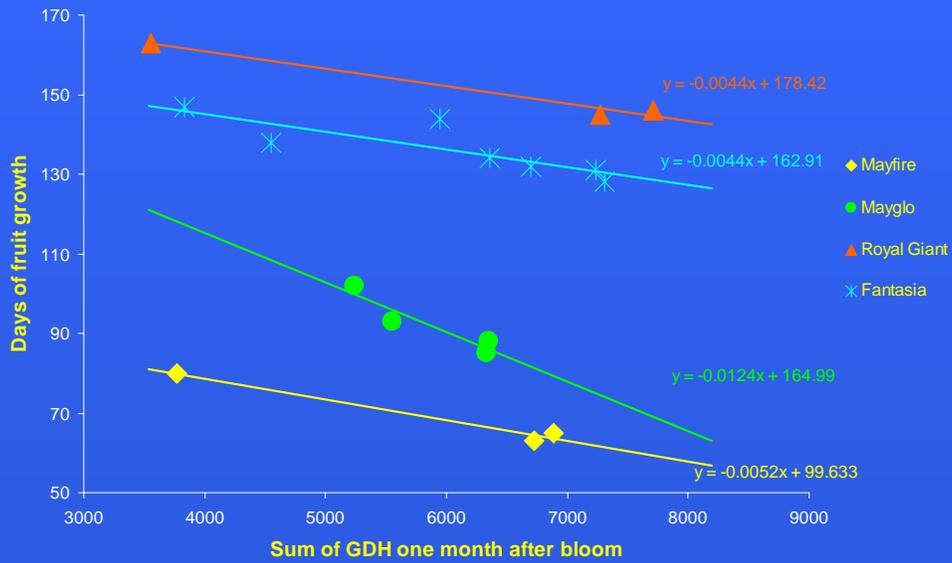
It has been established in peaches, Japanese plums, and nectarines that the accumulated temperatures (GDH or growing degree hours) during the first 30 days after full bloom are highly correlated with the number of days between full bloom and the harvest maturity date for specific cultivars (Ben Mimoun and DeJong, 1999). The following four figures show what those relationships are for selected cultivars of fresh market peaches, clingstone peaches, nectarines and plums.

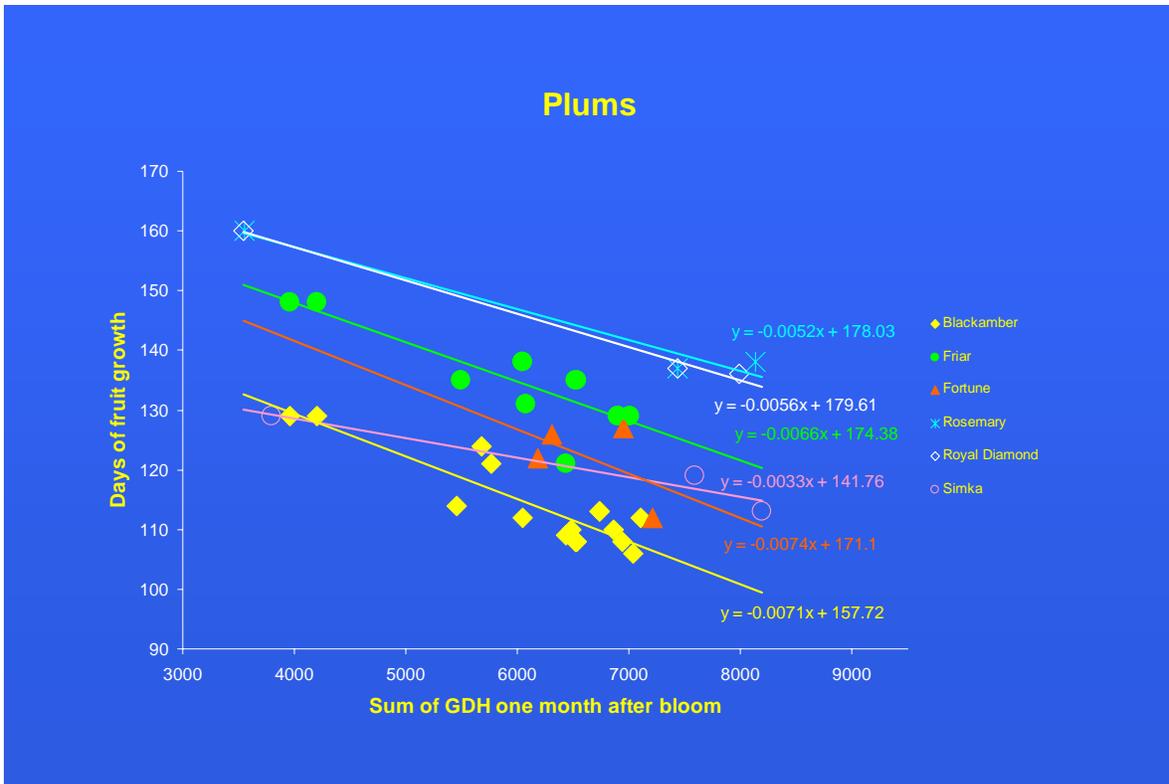


Cling Peaches



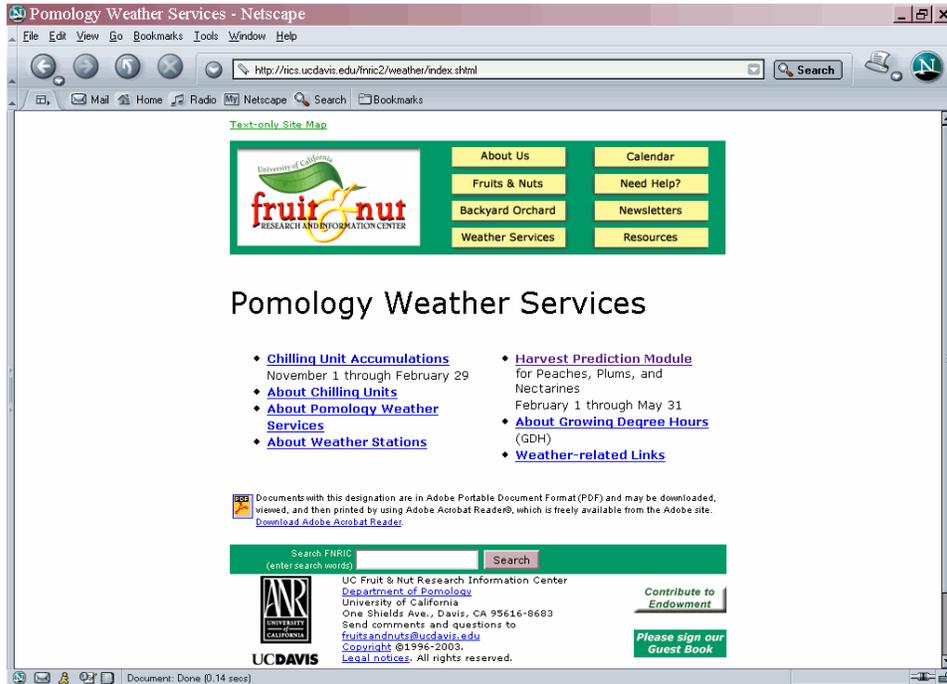
Nectarines



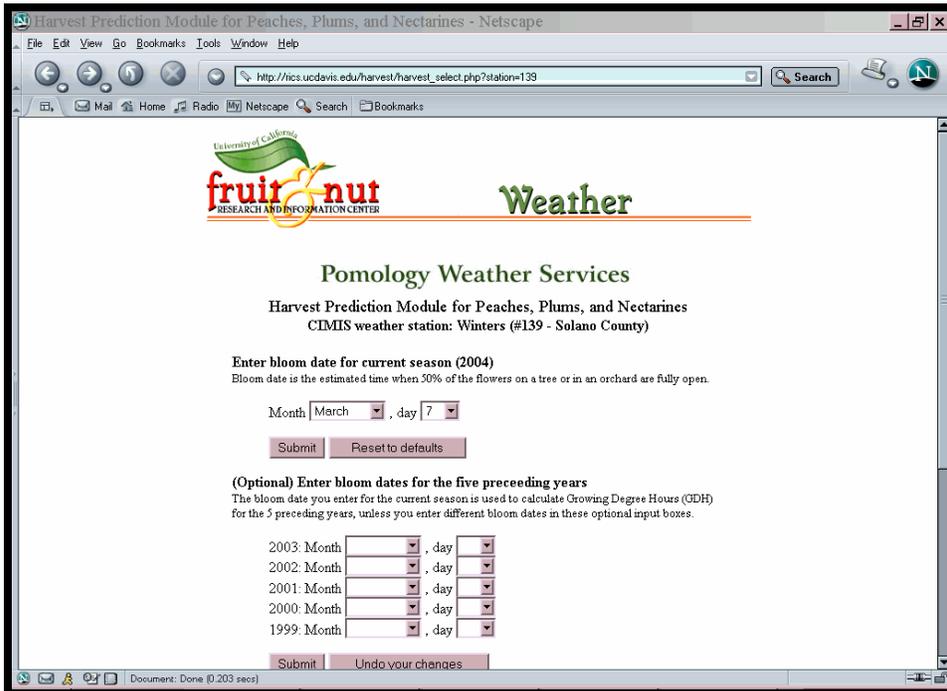


These relationships indicate that the spring temperatures in the first 30 days after full bloom govern fruit developmental rates and are a major factor in determining the harvest date for a specific cultivar in any given year. This relationship can be used as a tool, early in the season, for growers to estimate the approximate harvest date for stone fruits. This can be easily accomplished, 30 days after bloom, by going to the UC Fruit & Nut Research and Information Center web site-(<http://fruitsandnuts.ucdavis.edu>).





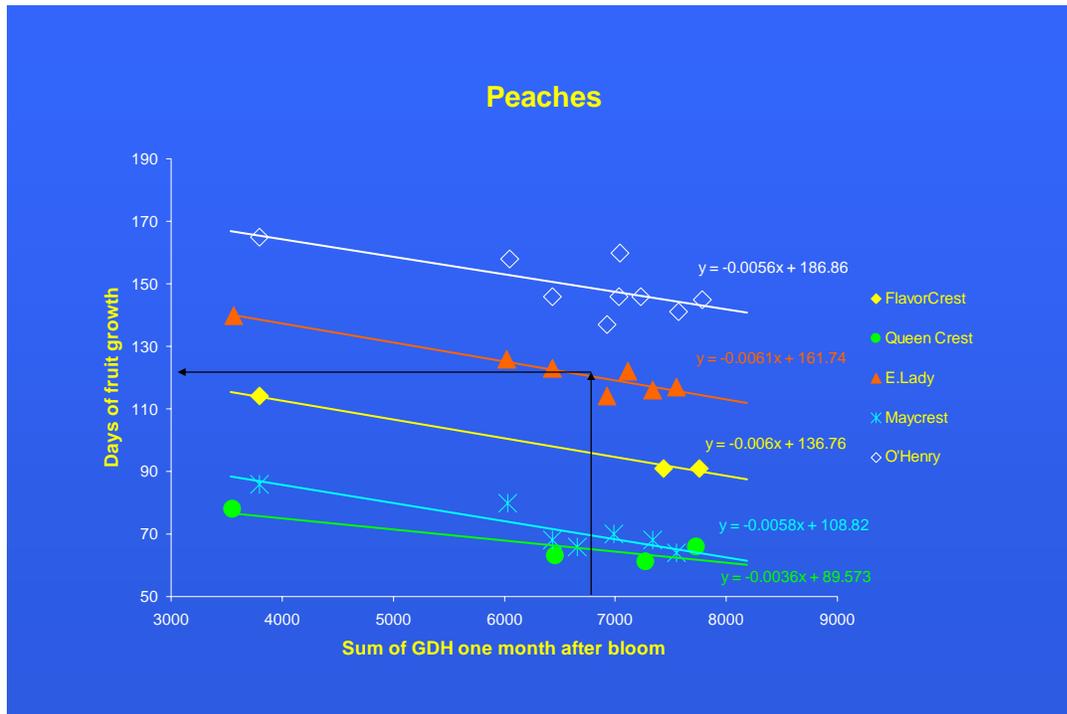
Once there, select **‘Weather Services,’** then **‘Harvest Prediction Model.’** Select the location of your nearest California Irrigation Management Information System (CIMIS) weather station and enter the date of full bloom. The data that will be shown are the accumulated GDH during the first 30 days after bloom. Using this number, you can estimate from Figure 1 how many days there will be from full bloom to harvest for this year.



Harvest Prediction Module for Peaches, Plums, and Nectarines
CIMIS weather station: Parlier (#039 - Fresno County)
[How to interpret the data in the table, below](#)

Days after Bloom	Bloom Date					
	Mar 8 2006	Mar 8 2005	Mar 8 2004	Mar 8 2003	Mar 8 2002	Mar 8 2001
Accumulated Growing Degree Hours (GDH)						
1	194	585	613	411	219	322
2	223	892	954	604	407	440
3	233	1,207	1,282	844	590	620
4	274	1,538	1,601	1,135	809	809
5	350	1,777	1,915	1,462	920	1,013
27	3,585	6,143	8,157	6,189	5,316	7,103
28	3,681	6,371	8,401	6,299	5,576	7,290
29	3,836	6,662	8,669	6,475	5,887	7,439
30	4,064	6,851	9,001	6,697	6,215	7,495

If the current year is like 2005 and there are 6,851 Growing Degree Hours accumulated between full bloom and 30 days after full bloom Then for Elegant Lady peaches you can expect harvest to be **about 123 +/- 3 days** from full bloom as indicated below. Keep in mind that weather near the time of harvest and local growing conditions (such as soil type, water status, tree nutrition, etc.) can also have some effect on the harvest date.



Unfortunately we don't have data for many of the cultivars currently grown in California but growers should be able to use this website to predict harvest date by selecting the cultivar on the figures that is most like the cultivar you are growing (in bloom and harvest timing) and they should be able to get a good estimate of their predicted harvest date.

One additional note about fruit sizing potential: data on peach harvests (Lopez, Johnson and DeJong, *California Agriculture* 2007 <http://CaliforniaAgriculture.ucop.edu>) indicate that fruit size is more difficult to obtain when the GDH 30 is above 6000 whereas fruit sizes are generally better when Springs are cool and GDH 30 is less than 6000. We believe that similar relationships probably hold for most stone fruits so if spring temperatures 30 days after full bloom are warm take special care to monitor your crop loads and thin accordingly.