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**Jump to CODLING MOTH  
Treatment Timings:  
Commercial Grower  
Homeowner**

## Upcoming Monitoring/Insect Activity

Peach twig borer	First flight at 400 DD (base 50F)
Western Cherry Fruit Fly	Hang traps at 750 DD (base 41F)
Codling Moth	Adult peak flight: 350-580 DD (base 50F) Larval hatch: 220-920 DD (after biofix)
Oblique banded leafroller	Hang traps in apples 800 DD (base 43F)
White Apple Leafhopper	First adults 550 DD (base 50F)

## Degree Day Accumulations, as of Wednesday, May 16

County	Location	Codling Moth, Peach Twig Borer (Base 50°F)			Western Cherry Fruit Fly (Base 41°F)
		DD since March 1	CM DD since biofix*	PTB DD since biofix*	DD since March 1
<b>Box Elder</b>	Perry	441	259	93	862
<b>Cache</b>	North Logan	268	131	---	563
	Richmond	352	96	---	692
	River Heights	370	187	---	712
<b>Carbon</b>	Price	461	190	---	847
<b>Davis</b>	Kaysville	426	223	42	848
<b>Salt Lake</b>	SLCC	493	228	---	951
	West Valley City	469	215	---	923
<b>Tooele</b>	Erda	592	190	---	1041
	Grantsville	627	221	---	1093
	Tooele	477	92	---	881
<b>Utah</b>	Alpine	389	186	---	790
	Genola	489	248	55	905
	Lincoln Point	407	---	21	799
	Orem	498	281	---	923
	Payson	421	215	63	817
	Provo	486	141	---	908
	Santaquin	400	221	61	793
West Mountain	446	194	52	846	
<b>Weber</b>	Pleasant View	465	296	112	888

\*“Base 41F” and “base 50F” refer to the lower temperature threshold at which certain insects develop; \***Biofix** is the date of consistent moth flight.

# Insect Activity

## APPLES AND PEARS

### **Codling Moth (CM):**

Spray dates and insecticide product recommendations for three different stages of the insect are provided under “[Current Spray Timings](#).” There is a section for commercial growers and one for homeowners.

The most critical time period for control will occur at 340-640 DD after biofix for generation 1, where approximately 70% of the 1st generation larvae is hatching.

This means that the fruit should be protected during this ENTIRE period. If the material you are using lasts for 7 days, then it must be reapplied once or twice during that 340-640 DD window. If it lasts 3 weeks, then you should be all set with one spray. Start your applications at the first date.

Many of you will have applied your first codling moth treatment to catch the first few eggs that are hatching. Please keep in mind that if you used a pyrethroid such as Warrior, chose a pesticide from a different class for your second spray, such as Assail, Calypso, Intrepid, or Imidan. Insects can develop resistance to pyrethroids very quickly.

It is important for commercial growers to continue to monitor the codling moth population with pheromone traps throughout the season. This information will help you to determine how well your treatment program is working. If you are using Mating Disruption, use two different types of lures:

- one trap with a 10x or DA-Combo lure to monitor moth flight (the 10x lure has a very high dose of pheromone for male moths and the Combo lure has a “pear ester” that also attracts female moths), and
- one trap with a 1x lure; if you catch NO moths in this trap, you know your mating disruption is working (the 1x lures have a lower dose of pheromone that trap male moths only)

If you are not using mating disruption, just use a 1x lure.

[Click here](#) for the USU codling moth fact sheet

### **Campylomma bug:**

Nymphs were observed in low numbers in Davis and Utah counties. They are about the size and color of an adult aphid, but move very quickly. At the nymph stage, they can feed on developing fruit, causing dimpling and fruit distortion. Lighter skinned fruit are more susceptible than darker-skinned. This damage should be of little concern to homeowners as it is primarily esthetic.

This year, because the nymphs have emerged a little later than petal fall, they are not predicted to be a problem. But it is still a good idea to monitor your orchard by beating

branches above a cloth tray and repeating in several locations.

Adult campylomma bugs are beneficial predators.

[Click here](#) for the USU campylomma fact sheet



Campylomma nymph

## PEACHES AND NECTARINES

### **Peach Twig Borer (PTB):**

We have had a few moth catches, with biofix dates:

Genola: May 12

Kaysville: May 13

Lincoln Point: May 14

Payson: May 12

Perry: Friday, May 11

Pleasant View: May 10

Santaquin: May 12

West Mountain; May 12

Peach twig borer can cause damage on apricots, peaches, nectarines, and plums. It causes damage in two ways: early in the season it bores into and kills terminal twigs, and later in the season, it chews into the ripening fruit.

Some growers may have applied a dormant spray to target the overwintering larvae, or a bloom-time spray of Bt to target the emerging overwintering larvae. If so, your population will probably be low this year. Using pheromone monitoring traps will help you to determine whether you need to spray.

For commercial orchards, mating disruption is also available for control of peach twig borer, but this is not an effective control measure on its own. Research has shown that moths can find each other for mating also by using acoustic signalling, not just by pheromones.

*Spray date recommendations will be provided in the next advisory, and will probably begin at some time around May 30.*

[Click here](#) for the USU peach twig borer fact sheet.

## Current Spray Timings - Commercial Growers

Note that these treatments are only recommended if you know you have the particular pest in your trees.

### Codling moth First Generation:

The projected timing dates of the spray periods shown below will be updated each week. Spray dates are dependent on what pest stage is targeted.

\*\*The most important timings are at 220-250 DD after biofix and again at 340-640 DD after biofix.

County	City	**Spray Dates to Target First Larvae Hatch	**Spray Dates to Target Max. Larvae Hatch
Box Elder	Perry, Willard, Brigham	----	<b>May 22 - June 12</b>
Cache	North Logan	May 23 - May 25	<b>June 4 - June 26</b>
	Richmond	May 27 - May 30	<b>June 8 - June 28</b>
	River Heights	May 18 - May 20	<b>May 30 - June 22</b>
Carbon	Price	May 18 - May 19	<b>May 28 - June 21</b>
Davis	Kaysville	May 16 - May 17	<b>May 24 - June 13</b>
Salt Lake	Salt Lake City (est.)	May 16 - May 17	<b>May 23 - June 11</b>
	West Valley City	May 16 - May 18	<b>May 23 - June 11</b>
Tooele	Erda	May 17 - May 19	<b>May 24 - June 13</b>
	Grantsville	May 16 - May 17	<b>May 22 - June 11</b>
	Tooele	May 16 - May 17	<b>May 22 - June 11</b>
Utah	Alpine	May 18 - May 19	<b>May 28 - June 18</b>
	Genola	----	<b>May 22 - June 12</b>
	Lincoln Point	----	----
	*Orem-High population	----	<b>May 19 - June 8</b>
	*Orem-Moderate pop.	----	<b>May 20 - June 9</b>
	Payson	May 16 - May 17	<b>May 25 - June 16</b>
	Provo	May 21 - May 23	<b>May 29 - June 17</b>
	Santaquin	May 16 - May 17	<b>May 25 - June 16</b>
West Mountain	May 17 - May 19	<b>May 26 - June 16</b>	
Weber	Pleasant View	----	<b>May 18 - June 9</b>

\*Due to a high population of codling moth in certain Orem areas, we had an early date for moth flight this year. If you have severe “wormy” apples, use the information for the “high population.” Otherwise, use the information for “moderate population.”

### Materials for codling moth control:

eggs: Horticultural oil, Esteem, Confirm, Intrepid, Azatin

larvae: Assail, Asana, Calypso, Carbaryl, Clutch, Diazanone, Guthion, Codling Moth Granulosis Virus, Imidan, Warrior, Sevin, Malathion

\*Reapply insecticides based on the residual period (i.e., protection interval) of the product used, and be sure to rotate among pesticide classes.

## Current Spray Timings - Homeowners

Note that these treatments are only recommended if you know you have the particular pest in your trees.

### Codling moth First Generation:

The projected timing dates of the spray periods shown below will be updated each week. The “beginning spray date” is at 220 DD after biofix, when larvae just begin to hatch, and the “ending spray date” is at 920 DD after biofix, when most of the larvae have hatched.

\*The third column represents the time period when most eggs are hatching, which is a crucial period for protecting your fruit. Use it as a guideline to time your applications so that you do not miss a spray or are late with a spray during that time.

**Read your pesticide label** for residual period (length of time it is effective) and re-apply at the given interval from beginning date to ending date, so that fruit is protected during this entire period.

County	City	Beginning Spray Date	Ending Spray Date	*Critical Period to Keep Fruit Protected
Box Elder	Perry, Willard, Brigham	May 14	June 26	May 29 - June 16
Cache	North Logan	May 23	July 11	June 12 - July 2
	Richmond	May 27	July 12	----
	River Heights	May 18	July 8	June 9 - June 28
Carbon	Price	May 18	July 7	June 11 - June 30
Davis	Kaysville	May 16	June 22	May 31 - June 18
Salt Lake	Salt Lake City (estimate)	May 16	June 24	May 30 - June 16
	West Valley City	May 16	June 24	June 1 - June 17
Tooele	Erda	May 17	June 25	----
	Grantsville	May 16	June 24	June 3 - June 18
	Tooele	May 16	June 24	June 1 - June 17
Utah	Alpine	May 18	July 1	June 2 - June 21
	Genola	May 14	June 26	May 26 - June 14
	Lincoln Point	----	----	----
	*Orem-High population	May 13	June 22	May 21 - June 10
	*Orem-Moderate pop.	May 15	June 23	May 24 - June 12
	Payson	May 16	June 30	June 3 - June 21
	Provo	May 21	June 28	June 2 - June 18
	Santaquin	May 16	June 30	June 2 - June 21
West Mountain	May 17	June 28	June 2 - June 19	
Weber	Pleasant View	May 14	June 24	May 26 - June 15

\*Due to a high population of codling moth in certain Orem areas, we had an early date for moth flight this year. If you have severe “wormy” apples, use the information for the “high population.” Otherwise, use the information for “moderate population.”

**Materials for codling moth control:** Sevin, Malathion, *Bacillus thuringiensis* (Dipel), and spinosad (Success, Entrust)

**Precautionary Statement:** All pesticides have benefits and risks, however following the label will maximize the benefits and reduce risks. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use.

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