



News/What to Watch For:

Hang codling moth traps within the week in most areas of northern Utah
Green peach aphid, green apple aphid, and rosy apple aphid nymphs are active; white apple leafhopper nymphs active
Images of bud stages, page 5
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Bud Stages

Just when we think spring is finally here, we see the snowflake symbols on the weather map forecast... Trees are blooming, but with recent frost damage, we'll keep our fingers crossed for decent fruit production.

Davis, Box Elder, Salt Lake, and Weber Counties:

Apples: Tight cluster
Apricots: Petal fall
Cherries (tart): Bud burst
Cherries (sweet): Full bloom
Peaches: Full bloom
Pears: First bloom - bloom

Cache County:

Apples: 1/4" - 1/2" green
Cherries (tart): Green tip-bud burst
Peaches: Pink - first bloom
Pears: Green cluster

Grand County (Castle Valley):

Apples: Full bloom
Cherries (sweet): First bloom
Peaches: Full bloom - petal fall
Pears: Full bloom

Utah County:

Apples: Tight cluster - open cluster
Cherries (tart): Bud burst
Cherries (sweet): Full bloom
Peaches: Full bloom
Pears: First bloom

Insect and Disease Activity/Info

Codling Moth

There is still time to hang monitoring traps (100 - 150 DD) in all areas of northern Utah except Cache County. Castle Valley area should be seeing biofix soon. (Traps and lures can be purchased at Great Lakes IPM - (<http://www.greatlakesipm.com/trecelures.html>.) We use these traps to determine a biofix (date at which moths first start to fly). This date helps in the use of the codling moth model, where degree day values predict certain life stages. (We start accumulating degree days the day after biofix.) According to years of research, here are degree day values (post biofix) for important codling moth life stages:

Mating begins: 58

Egg-laying begins: 158

1% egg hatch (applications of larvicides must be in place at this time): 220

Period of greatest egg hatch: 340-640

How to determine biofix: Hang codling moth trap as high in the tree as possible, parallel to the prevailing wind and keep the openings clear of any foliage or twigs. If you have a "hot spot" be sure to hang a trap there. Monitor traps every two to three days during full bloom and petal fall. If the evening temperatures are above 55 degrees, check daily. Biofix occurs when you catch 2 or more moths. (This date is still used even if you don't catch any in following nights due to cold weather.) First moth flight normally occurs near full bloom on 'Red Delicious'.

Note to commercial growers: codling moth biofix cannot be established inside a mating disrupted block, so if you plan to hang dispensers pre-biofix, you can still get a biofix at a location that is not disrupted, such as a backyard tree.

Leave traps in the orchard all season to determine your codling moth population (check once/week). Use a 1x lure in conventional orchards (be sure to get the type that lasts 6 weeks to save time) and use a 10x or DA-combo lure in mating disrupted orchards.

Degree Day Accumulations and Insect Development

Upcoming Monitoring/Insect Activity

By Insect (in order of appearance)	
Green peach aphid (GPA)	Egg hatch begins at first bloom (peach)
Black cherry aphid (BCA)	Egg hatch at bud break (cherry)
Campylomma bug (CB)	Egg hatch begins at first pink (apples)
White apple leafhopper (WALH)	Egg hatch begins at first pink (apples)
European red mite (ERM) (rare)	First egg hatch around 135 DD (base 50)
Codling moth (CM)	Hang traps at 100 degree days (base 50) First flight at 190-260 DD

By Host (see abbrev. at left)	
Apple	RAA, ERM, CB, WALH
Apricot	
Cherry	BCA
Peach	GPA
Pear	ERM

Degree Day Accumulations [\(click here](#) for more information on degree days)

March 1 - Tuesday, April 29

County	Location	Codling Moth, Peach Twig Borer (base 50)	Western Cherry Fruit Fly (base 41)
Box Elder	Perry	104	307
Cache	North Logan	77	245
	Providence	70	191
	Smithfield	70	219
Carbon	Price	146	380
Davis	Kaysville	111	328
Grand	Castle Valley	315	665
Salt Lake	SLC	142	387
	West Valley City	137	384
Tooele	Erda	138	394
	Grantsville	170	433
	Tooele	138	394
Utah	Alpine	107	310
	Genola	147	374
	Lincoln Point	212	507
	Orem	112	312
	Payson	125	326
	Provo	149	374
	Santaquin	120	323
	West Mountain	140	356
Weber	Pleasant View	116	339

“Base 41” and “base 50” refer to the lower temperature threshold at which certain insects develop. For example, no codling moth development occurs below 50 degrees.

Precautionary Statement: Utah State University Extension and its employees are not responsible for the use, misuse, or damage caused by application or misapplication of products or information mentioned in this document. All pesticides are labeled with ingredients, instructions, and risks. The pesticide applicator is legally responsible for proper use. USU makes no endorsement of the products listed herein.

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