



## Integrated Pest Management Program

Department of Plant Science and Landscape Architecture  
UConn Extension

Fruit Update – 5/26/2023

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This has been a rough week for everyone. It's been incredibly busy running around helping people assess their damage. I have not dealt with a situation like this before. I know many of you are in the same boat. Below are some tips on managing your farms after a frost from some regional experts who have a better handle on this type of situation. Please have a read-through and if you have further questions, please give me a call.

**Before that, it is of the utmost importance that all of you take the time to fill out the**

**2023 Connecticut Grower Crop Loss Report.**

Click this link → [https://www.cognitofrms.com/CTDoAg/\\_2023GrowerCropLossReport](https://www.cognitofrms.com/CTDoAg/_2023GrowerCropLossReport)

This form will be used to gather data from growers related to crop loss impacts incurred to date in 2023 due to weather. Connecticut Department of Agriculture will share data with USDA Farm Service Agency and UConn Extension. By filling out this information it will assist these entities in determining if a disaster declaration can be obtained. Your farm name and contact information is not required, but if you would like to be contacted, please share that.

**USDA disaster assistance** information can be found on [farmers.gov](https://www.farmers.gov), including USDA resources specifically for producers impacted by winter storms. For FSA programs eligibility, producers should contact their local [USDA Service Center](#).

If the impacts of crop loss are causing you, your farm family, or farm workers increased stress or negatively impacting your mental health, resources are available at [www.CTFarmStressRelief.org](https://www.CTFarmStressRelief.org). For immediate crisis help, call or text 833-897-2474.

The form should be straightforward.

There are two sections:

- 1) for the frost event on May 18 and
- 2) for the cold snap in February 3-4 (that killed all the peaches).

Fill out whatever section applies to you, both if you were affected by both. These numbers that you give will be rough estimates, don't go crazy trying to calculate percent loss and loss in revenue. However, DO NOT SELL YOURSELF SHORT! For example, if you would have made wine with your grapes this year, put the loss in revenue from the anticipated wine sales. This goes for any other farm product; the form is trying to gauge the anticipated economic impact on the fruit industry and the CT economy as a whole.

If you are having trouble filling out the form, I can assist, just reach out to me. Also, this is not a substitution for reporting to any other agency (insurance). This is for disaster declaration and relief only.

### Managing berry planting after frost (NE Berry Call Recommendations):

- Pest control
  - Plantings with total fruit loss still need to be actively managed for pests and weeds.
  - Potential for botrytis is greater in all affected berries with dead tissue on the plant (black strawberry blossoms, blighted tips of blueberry canes, black bramble flowers). It would be a good idea to spray now for botrytis, especially in strawberries. Other fungal pathogens don't live in dead tissue as botrytis does, so we only worry about botrytis.
- Pruning
  - In bush and cane-berries that have a big percentage of crop lost, anticipate summer thinning because extra energy will be allocated to vegetative growth. Perhaps due to the lost crop this year, next year's crop will be larger.
  - June-bearing strawberry plantings should not be renovated now if they had total crop loss. They should be renovated in July or August as usual. Additional N applications may be helpful in the case of total crop loss by helping the plants put on biomass. Crowns should be cut in half and checked for damage from frost. Depending on the degree of damage there, may have diminishing returns on inputs.
- Watering
  - Plantings should be watered to minimize drought stress. This might help remaining fruit recover instead of senescing.
- Fertility
  - At this point in the season most blueberries have had 1 round of fertilizer applied already. A second round of fertilizer at this point in the season is important because it helps set the fruiting buds.
  - Foliar nutrient sprays are popular amongst growers. Some have seen good results from Megafol (3-0-8) by Helena—improved size of leaves on sprayed bushes. Some growers do 2 applications at a pint/acre each (mid-April and post-bloom), while others do 1 big application at 1 quart/acre each.
  - Some growers also spray potassium on blossoms and developing fruit for winter protection. This is especially done in apples, sometimes on raspberries too. The K<sup>+</sup> ions prevent the growth of ice-nucleating bacteria; copper sprays work too.

### Managing tree fruit after frost (Terrance Bradshaw):

- Thinning:
  - Thinning is going to be complicated a lot by crop status, of course. For orchards that have no fruit or heavily damaged fruits (meaning more than 75% )do not consider thinning this year. For orchards with less than 20% damage I would consider thinning as normal this year. The question comes with orchards that have moderate damage between 25 and 75%. Not thinning those orchards may result in heavy set of small fruit that could promote biennialism, but trees are likely to respond well to thinners applied in the next week, given both the cold damage and the warm sunny, weather that we are expecting coming up. My tactic at the UVM orchard, which experienced moderate fruit damage between 20 and 70%, depending upon cultivar, was to apply a low rate of NAA thinner with a low rate of carbaryl insecticide. This could be a gamble – we have 70 varieties across the whole orchard and it is difficult to thin based upon variety even in a 'normal'

year. This is not an uncommon problem for retail orchards to face. I do not have the greatest confidence in this strategy this year, and have difficulty recommending blanket sending recommendations to growers given the state of the crop this year. In the end, I would trust your gut – if you have a good crop thin it, if you have a moderate crop consider thinning it lightly as we can come back in later next week when we can see better the effects of both the frost and any thinner applications you may have applied.

- Insect management:

- This will also differ, depending upon the state of the crop in your orchard. For orchards with a full or even a moderate crop, I would plan to manage your insect pests as normal this year. Petal insecticide sprays should have already gone on in most orchards. Inland orchards and cooler sites may be ready for a petal fall spray now. Normally our petal fall sprays are targeted at European apple sawfly, early emerging codling moth, and plum curculio. All of those pests are fruit feeders so orchards that have no fruit or are assuming to have very little fruit may consider omitting all insecticide applications targeted toward protecting fruit. The difficult situation comes where orchards have a low set of fruit where the expense of the application on a per bushel basis could be quite high but the value of the few apples you have is also high. If there's any question about whether or not you have sufficient crop set in your orchard, I would go ahead and treat as usual. If you have no crop or nearly no crop, then you may consider omitting those insecticides. However, I would consider maintaining some coverage primarily for shoot and leaf feeding, lepidopterous caterpillar larvae. That may mean including BT sprays in petal fall, scab, thinning, or other sprays in order to keep down leps like obliquebanded leaf roller and tent caterpillar. In orchards with little to no crop, the great reduction insecticides used this year may allow beneficial populations to increase substantially, setting you up for a better IPM program next year. I would however not ignore trunk applications of Assail or another appropriate insecticide in young plantings to avoid issues with dogwood and other borers.

- Nutrients:

- For trees with little to no crop nitrogen applications should not go on this year unless trees are under vigorous. For all other trees, fertilize as you normally would. For trees with little to no crop this year potassium is not likely to be removed in any significant amount because that is usually removed in harvested fruit. However, it is important to maintain or improve the potassium status in your orchards to ensure that you have an appropriate amount of that nutrients going into next year when it is likely orchards, will have a heavy crop load. I would consider applying magnesium potassium fertilizers in the next month or so regardless of crop status.

This is already a very long update, so I'll wrap it up. Please reach out to me if you need anything else.

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