



“Fruit Facts” – Tuesday, March 23 2021

Good morning!

Spring is in the air (a little too soon for some of us, to be honest), and it seems time for this season’s first Fruit Facts issue. We will begin more regular, weekly issues soon, but for now, some spring updates and reminders!

Are you interested in learning about “carbon farming”?

Orchard & Vineyard owners are invited to attend a virtual presentation to learn more about soil health incentive programs, otherwise known as Payment for Ecosystem Services. These programs pay farmers to use agricultural practices that sequester carbon and other ecosystem services that grow healthy soils and keep nutrients on their land.

When: March 31, 3:00pm. 54 spaces left! Register at <https://www.senecalake.org/events>

Need a few final DEC recertification credits?

The New England Winter Fruit Seminar Series still has two virtual webinars, each worth 1.25 DEC credits:

- [Tree Row Volume: What it is, why it matters, and how to use it](#)
- [NEWA 2.0: Project upgrades for 2021](#)

Be sure to email an image of your license to myself or to Mike Basedow, and log in 15 minutes early, to receive your credits.

CCE LOF and ENYCH Pruning Video Resources:

- [Precision Pruning Honeycrisp](#) by LOF (NEW RELEASE)
- [Precision Pruning for Early Crop Load Management](#) by ENYCH
- [Pruning Honeycrisp for Annual Production Video](#) by LOF

IPM Notes...Janet van Zoeren

With such fluctuating temperatures so far this spring, there may not be a good window for **dormant oil sprays**. Remember that it is best to get those on by ½” green, and that a cold snap in the two days prior or two days after oil application can damage tissue treated with oil. **Today may be a good window in parts of our region**, but check your own favorite weather prediction site, and keep in mind that this year it may be a bit of a gamble to put that on. With cooler temperatures predicted for the rest of the week, development may slow down and **there will likely be another “good weather window” in early April** before most of the buds push too much.

This 2-3% dormant or delayed dormant oil will help with **mites** and **San Jose scale**, both of which were fairly prevalent in many orchards last fall. It can also help clean up populations of **pear psylla**.

Apple scab control starts now with a feed-grade **urea application**, before green tip, directed at the ground to speed up leaf litter decomposition (this will reduce inoculum and give you a huge head start for control of apple scab, as well as **Marsonina blight, cankers, and fruit rots**). Apply urea at 40 lbs. in 100 gal/A. and rinse the sprayer with water afterwards to prevent corroding the sprayer pump.

Apple scab wasn't very prevalent last year, but if you had an outbreak, a **dormant or delayed dormant copper spray** will help clean up any apple scab conidia that overwintered in buds scales, and provide an early protection against ascospore release for the following 7-10 days. Apply from silver tip until green tip.

Stone Fruit. A dormant or delayed dormant treatment with copper can help reduce **bacterial canker** inoculum.

Peach leaf curl control is built upon a single **dormant fungicide application**; it will be much more difficult to play catch-up if you miss this application. Fungicides labeled include chlorothalonil (i.e. Echo), metallic copper (4 - 8 lbs per acre), Ferbam (4.5 lbs per acre), or Ziram (3 ¾ - 8 lbs per acre). Copper products will also provide some suppression of peach bacterial spot.

Any questions about pest management, please call or email me: jev67@cornell.edu, 585 797 8368.

Horticultural Notes...Mario Miranda Sazo

Finish precision pruning of Gala and NY-1 before budbreak and wait for Honeycrisp and Fuji: There will be a 3-4 week window from green tip to bloom when it will be easy to identify and count Honeycrisp flower buds per tree. Then you will be able to prune to the target flower cluster number at that time.

Precision pruning is **essential** to avoid biennial bearing of Honeycrisp and to improve fruit size of annual varieties like Gala or NY-1. We suggest counting the total number of flower buds on 5 representative trees and then use pruning to remove extra flower buds, leaving a precise number of buds. To accomplish this, the first step of precision pruning is to determine the target number of final fruits at harvest which is a function of desired fruit size, yield and the potential of the trees. Second, calculate the number of buds to leave based on the recommended bud load, and third, adjust the number of buds to be left after pruning by the percentage of buds that are floral. The following is an example of a final fruit number target and the calculated spur number to leave after pruning on Tall Spindle Honeycrisp block planted at 3X11 ft. spacing (1320 trees/acre).

Target yield=900 bu/ac * target fruit size (72 count @260gr) / tree planting density (1,320 trees/acre) = 50 fruits /tree.

Remember: we suggest leaving a **few extra flower buds as insurance** against frost or poor set. Based on the most recent Cornell Honeycrisp pruning research we are currently suggesting that growers leave **80% more flower buds** than the target fruit number as insurance. In the example where we need 50 final fruits/tree we suggest increasing that number by 1.8=90 flowering spurs. Lastly, if only 50% of the spurs are floral then the number of spurs to leave after pruning would be double that number (180 spurs). The table below gives bud load factors and target final flowering spur numbers for annual and biennial bearing cultivars.

Bud load factors for annual and biennial bearing varieties	Target Final Flowering Spur Number			
	60 fruit per tree	80 fruit per tree	100 fruits per tree	120 fruits per tree
1.5 buds per final fruit number for annual bearing varieties	90 flowering spurs	120 flowering spurs	150 flowering spurs	180 flowering spurs
1.8 buds per final fruit number for biennial bearing varieties	108 flowering spurs	144 flowering spurs	180 flowering spurs	216 flowering spurs

Early Spring Berry Maintenance

This article will approach spring maintenance by activity, rather than berry type. Not all berries or systems will require each activity. Species (crop) specific activities are discussed. New York comprises many micro-climates, and plant development varies tremendously farm-to-farm and season-to-season. Check your own plants for phenological development, any mention of months/dates are averages and estimates.

Pruning. With the exception of black raspberries, **caneberries and blueberries** should be pruned before budbreak. Mature blueberries should, at a minimum, have the oldest canes removed, and any that are diseased, damaged, leaning into the rows or crossing over. Prune out and remove any gall wasp galls from the field. Raspberry floricanes should be narrowed into a 12 inch row and thinned to 4 canes per foot. Black raspberries are pruned once buds break, to identify and remove winter damage.

Winter Cover (Straw) Removal. Leaving straw on too long will stress the **strawberry** plants as they are trying to “wake up” from dormancy, because straw blocks the light for the overwintering leaves to use for photosynthesis. Research has shown that late removal of straw will hurt fruit yield and plant vigor. Preemergent herbicides need to go on while plants are still dormant; straw should be removed and herbicides applied (see below for recommendations) before new leaves emerge from crowns.

Weed Management. If you are using mulch to prevent weeds, check that the barrier is still good. With wood chip mulch, this means 3-5 inches over the soil. If the mulch is decomposing and allowing weeds to germinate, consider herbicides, hand weeding or fresh mulch. With landscape cloth or plastic mulch, consider mending holes and brushing or blowing off any organic residues that are building up, where weed seeds might take hold.

Winter annuals are taking advantage of the warmer weather, and can easily get out of control if not dealt with early. It is time to think about getting out pre-emergent herbicides to take care of these and other early germinating weeds. Most preemergent herbicides must be applied to bare soil. If the weeds got large last fall, plan to clear any residual stems and leaves in a strip along the row before applying herbicides. There are many product options, these are just some options.

You can manage perennial weeds in **blueberries and raspberries** using Casoron 4G (or Casoron AS); both need to be watered in for activation. Other options include Devrinol (seedling grasses), Solicam (annual weeds and nutsedge), Surflan AS (grasses), Princep (annual weeds and crabgrass), Velpar (some perennial weeds), Dual Magnum (nutsedge and other problem weeds) and Sinbar (grasses, broadleaves), depending on which weeds are a problem in a particular planting. Most need to be applied before weeds germinate, see label or Cornell Guidelines for more details.

In **strawberries**, raking the straw mulch into the middles can help act as a weed barrier. However, herbicides are usually still required, *if not applied in the fall*. 2,4-D (Amine 4 or Formula 40) can be applied while the plants are still dormant to control existing broadleaf weeds. Apply Chateau at the same time for pre-emergent control, but not after dormancy has broken or severe injury may result. You may only use Chateau once in a calendar year. Devrinol may also be applied in early spring to control seedling grasses. It should be applied to bare ground and watered in or incorporated. Most other herbicides are only labeled for pre-planting, directed or shielded applications, or at renovation, again, see labels for specific recommendations.

Frost Protection. Frost protection with overhead sprinklers or double row covers (“fleece”) is highly recommended for strawberry growers. Sprinklers on risers have benefited blueberry growers as well. Late freezes, such as those we had in 2020, can destroy a crop in bloom. This is the time to get your equipment out and test it, making sure your water source(s) and pumps are working as well. Be sure to have thermometers on hand and in place in the field, as the temperature at ground level may be different (lower!) than at your house or barn. Growers using row covers to advance the crop have had best results using sprinklers over the top of the covers.

Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide. Copyright 2019. All rights reserved. No part of this material may be reproduced or redistributed by any means without permission. Cornell Cooperative Extension provides equal program and employment opportunities.

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