

THINGS TO CONSIDER ...

Less is more. Consider choosing those apple and pear trees that bring you the most enjoyment. You can replace other trees with species that are less likely to serve as hosts of diseases and commercial pests.

Explore alternative trees! Plums and apricots are delicious, thrive in the Methow Valley, and are nearly pest and disease-free. For wildlife, consider planting native shrubs like bitterbrush, serviceberry or chokeberry. (Avoid hawthorne – it’s a preferred host of apple maggot!) For shade, consider the relatively fast-growing catalpa or silver maple that were often planted by the early homesteaders. For fragrant spring blossoms, try mock orange or linden.

Washington State Law mandates that landowners must control the spread of horticultural pests and diseases that could detrimentally impact commercial orchards. (RCW 15.09.060: “Owners Duty to Control Pests and Diseases”)

Don’t move fruit! The upper Methow Valley is currently under an “Apple Maggot Quarantine” from the Washington State Department of Agriculture, which means commercial orchards must be inspected by the WSDA before moving fruit, and backyard fruit growers are not permitted to move fruit outside the quarantine boundary.

Tri-County Horticultural Pest & Disease Control Board

(509) 667-6827

<http://www.co.chelan.wa.us/horticultural-pest-and-disease-board>

Washington State University Okanogan Extension Office and Master Gardener Program

extension.wsu.edu/okanogan
(509) 422-7245

Washington State University Tree Fruit Extension:

treefruit.wsu.edu

Publications:

- treefruit.wsu.edu/crop-protection/opm/codling-moth/
- cpg.treefruit.wsu.edu/
- treefruit.wsu.edu/backyard-fruit-trees/

Still have questions? We’d love to help try to answer them!

Methow
Conservancy

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Living Among Orchards

Agriculture is one of the biggest economic sectors in Okanogan County. In addition to hay fields, pastures, grain crops, cattle operations, and diversified small farms, Okanogan County is home to 25,000 acres of commercial orchards.



As backyard tree fruit growers, it’s important that we be *good neighbors* to *our local orchards*. How we care for our backyard trees can have a big impact on commercial growers. It’s possible for backyard fruit trees, especially apples and pears, to host pests or diseases that can move on to affect commercial fruit crops. *It’s important to know what to watch for!*

CODLING MOTH



Codling moth larvae burrow into apples and pears and feed on the fruit's seeds. When they are done gorging, the larvae exit the fruit and search for a sheltered location at the base of the tree to spin a cocoon. There are typically at least 2 generations of codling moths per season in the Methow Valley, with the first generation of moths emerging in May.

The sign of a codling moth is a signature "sting" on developing apples or pears. One sting indicates a larva is developing inside the fruit. A second, similar mark indicates the larva has already emerged from the apple or pear, and has



gone on to infect more fruit.

Commercial fruit growers carefully monitor for both codling

moth and apple maggot. They use a "degree-day" model to predict emergence and life stages of the pest, in order to know when to apply organic or conventional control sprays.

**photos provided by WSU Tree Fruit Extension*

APPLE MAGGOT



Adult apple maggot flies lay their eggs in apples, pears, and native hawthorns July through early October. Feeding larvae leave brown trails inside the fruit, and infected fruit appears dimpled and lumpy.

CONTROL OPTIONS

Organic and conventional control materials are only effective with careful monitoring and with attention to pest life stages and accumulated "degree days." Organic sprays often must be applied every week, starting 10 days after full bloom, until the end of August.

More information about effective organic and conventional spray programs can be found in WSU's Crop Protection Guide (see reverse.)

For backyard growers, keeping to the critical and rigorous spray schedule is challenging, and often unrealistic. So what can a conscientious backyard fruit grower do? At the very least, check your apples or pears for signs of moth or maggot damage. If you find suspicious fruit, remove it from the tree. Place it inside a tightly-sealed, plastic bag and let it "cook" for several weeks in the hot sun before composting or disposing. You

may not be able to save the fruit for your table, but you can avoid hosting these pervasive pests -- something our local orchardists will really appreciate!

Alternatives to spraying include covering the fruit with fruit protection bags (available online or through the Twisp Feed Store) and removing all apples that are not covered. Codling moth pheromone "lure" traps, parasitic wasps, and tree bands can be used to help reduce populations, but are not sufficient as a stand-alone control.

FIRE BLIGHT



Fire blight is caused by a bacteria. It thrives under conditions of high temperature and humidity, and is

often spread during bloom. It manifests in the form of black cankers on apple and pear tree trunks and branches, and on wilted or brown shoots and leaves.



Trees can easily be saved from an infection by aggressive removal of blight cankers, including wood 12-24

inches beyond the edge of the visible canker. Canker removal is best conducted during the winter, when the pathogen is dormant.