

## Peach Twig Borer *Anaria lineatella*



### Identification

- ◆ Adult moths have steel gray mottled forewings.
- ◆ Larvae are small, brown caterpillars with white intersegmental bands and a black head capsule.
- ◆ Pupae are dark brown, without a cocoon.

### Reasons for Control

- ◆ It can kill twigs and disfigure or infest fruit.
- ◆ Can damage stone fruits by feeding in shoots and causing shoot strikes, attacks apricots, nectarines, plums and prunes, as well as peaches.

### Control Notes

- ◆ Within an integrated pest management program, the preferred management strategy for peach twig borer is well-timed treatments of environmentally sound insecticides around bloom time.

## Pear Psylla *Cacopsylla pyricola*



### Identification

- ◆ Small, oval, creamy white to yellow eggs can be found before buds open at the base of terminals and fruit spurs.
- ◆ Adult pictured above is similar in size to a fruit fly.

### Reasons for Control

- ◆ As a sap-sucker, the insect can stunt, defoliate, and/or kill pear trees when present in large numbers.
- ◆ Excretions support fungal growth that blackens trees and discolors fruit.
- ◆ Disease vector for Pear Decline, leading to unproductive plantings.

### Control Notes

- ◆ Usually controlled in the early spring with dormant oil applications targeting the egg stage.

Fruit	Pests
Apples	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Japanese Beetle</li> <li>◆ Oriental Fruit Moth</li> <li>◆ Spotted Lanternfly</li> </ul>
Apricots	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Cytospora canker</li> <li>◆ Greater Peach Tree Borer</li> <li>◆ Japanese Beetle</li> <li>◆ Oriental Fruit Moth</li> <li>◆ Peach Twig Borer</li> </ul>
Berries (strawberries, raspberries)	<ul style="list-style-type: none"> <li>◆ Japanese Beetle</li> <li>◆ Spotted Wing Drosophila</li> <li>◆ Oriental Fruit Moth</li> </ul>
Cherry	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Cytospora canker</li> <li>◆ Greater Peach Tree Borer</li> <li>◆ Japanese Beetle</li> <li>◆ Oriental Fruit Moth</li> <li>◆ Western Cherry Fruitfly</li> </ul>
Grapes	<ul style="list-style-type: none"> <li>◆ Grape Phylloxera</li> <li>◆ Japanese Beetle</li> <li>◆ Oriental Fruit Moth</li> <li>◆ Spotted Lanternfly</li> </ul>
Peach	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Cytospora canker</li> <li>◆ Greater Peach Tree Borer</li> <li>◆ Japanese Beetle</li> <li>◆ Peach Twig Borer</li> <li>◆ Oriental Fruit Moth</li> </ul>
Pear	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Oriental Fruit Moth</li> <li>◆ Pear Psylla</li> </ul>
Plum	<ul style="list-style-type: none"> <li>◆ Codling Moth</li> <li>◆ Cytospora canker</li> <li>◆ Greater Peach Tree Borer</li> <li>◆ Japanese Beetle</li> <li>◆ Oriental Fruit Moth</li> </ul>

Upper Grand Valley Pest Control District &  
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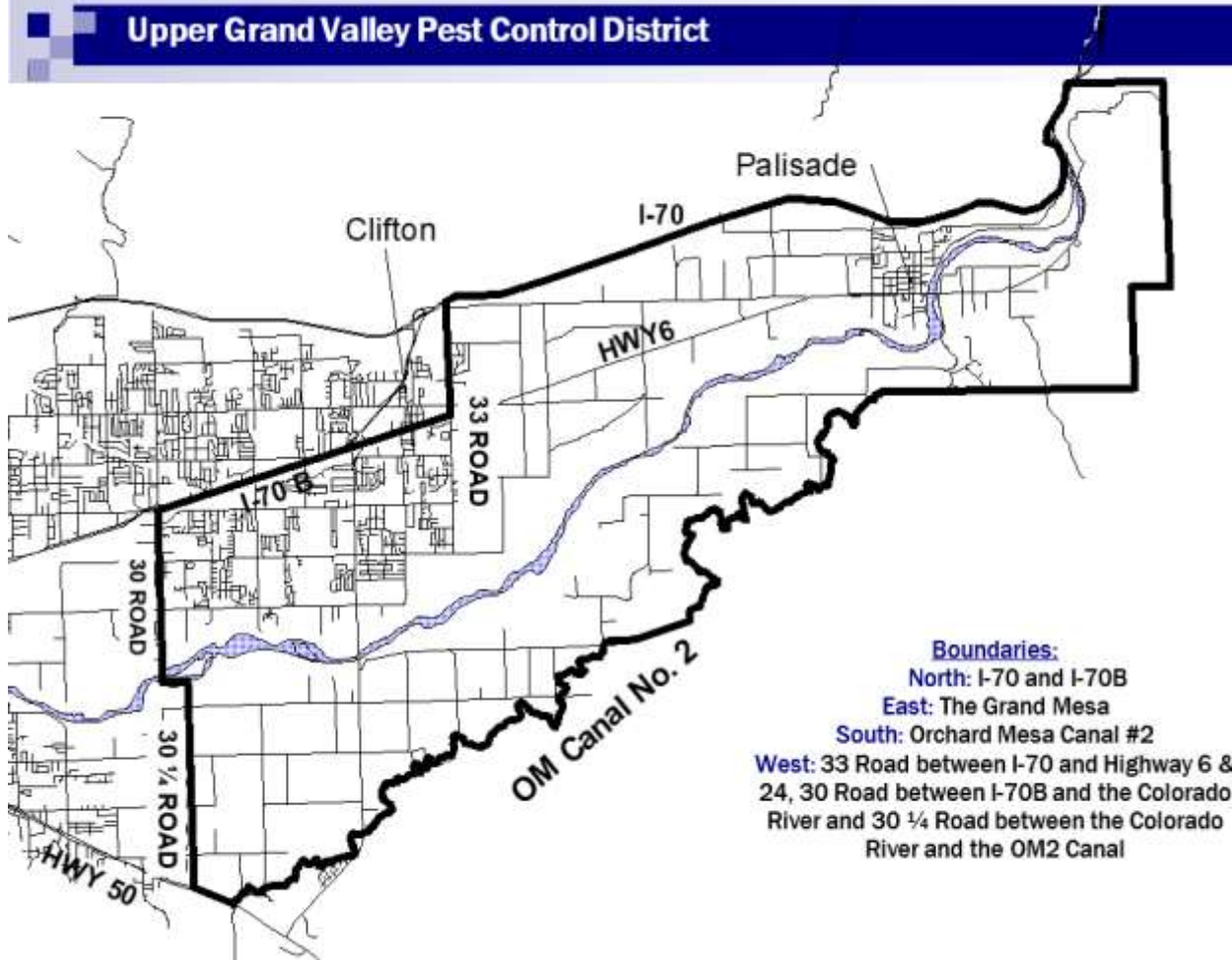


THE MISSION OF THE UPPER GRAND VALLEY PEST CONTROL DISTRICT IS TO PROTECT THE COMMERCIAL FRUIT INDUSTRY FROM INSECT, DISEASE AND WEED INFESTATIONS ARISING FROM WITHIN THE DISTRICT BOUNDARIES.

THE UGVPCD WAS FORMED IN 1965 UNDER COLORADO REVISED STATUTES TITLE 35, ARTICLE 5, "PEST CONTROL DISTRICTS".

# Fruit Pest Pocket Guide





**Boundaries:**  
 North: I-70 and I-70B  
 East: The Grand Mesa  
 South: Orchard Mesa Canal #2  
 West: 33 Road between I-70 and Highway 6 & 24, 30 Road between I-70B and the Colorado River and 30 1/4 Road between the Colorado River and the OM2 Canal

**Other Species of Concern**

- ◆ Aphids
- ◆ Flathead apple borer (*Chrysobothris femorata*)
- ◆ Grape berry moth (*Endopiza viteana*)
- ◆ Grape leafhopper (*Erythroneura spp.*)
- ◆ Mealy bugs (*Pseudococcidea spp.*)
- ◆ Plum curculio (*Conotrachelus nenuphar*)
- ◆ Walnut husk fly (*Rhagoletis complete*)

**Other Regulated Insects:**

- San Jose scale (*Aspidiotus lineatella*)
- Shot hole borer (*Scolytus rugulosus*)

Spotted Lanternfly  
*Lycorma delicatula*



Identification

- ◆ Early nymphs have black bodies with bright white spots. Fourth instar nymphs are red, black, and white about 1/2 inch long.
- ◆ Adults have hind wings with red patches, and gray forewings with black spots and veins. When folded, only the forewings are visible and provide camouflage against tree bark.

Reasons for Control

- ◆ Nymphs and adults prefer to feed on the invasive tree of heaven (*Ailanthus altissima*) but also feed on a wide range of fruits, crops, including grapes, apples, hops, walnuts, ornamental landscape plants, and many tree species.

Control Notes

- ◆ Check outdoor items, bricks, stone, tree of heaven for spotted lanternfly egg masses. Scrape any egg masses into a plastic zippered bag filled with hand sanitizer, then zip the bag shut and dispose of it properly.
- ◆ Contact insecticide may be used for adults and nymphs.



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## Cytospora Canker *Cytospora spp.*



### Identification

- ◆ Large amounts of oozing, dark colored sap, infected with microscopic spores.
- ◆ Systematic dying off of infected tree limbs branch by branch.

### Reasons for Control

- ◆ Drastically decreases the lifetime of orchards.
- ◆ Spores easily spread from tree to tree and orchard to orchard.

### Control Notes

- ◆ Take steps to reduce damage to trees as spores infect open wounds.
- ◆ **Don't prune in wet conditions or with unsanitary equipment** which can increase contamination.
- ◆ Burn infected wood to destroy spores – do not chip and use as mulch

## Grape Phylloxera *Daktulosphaira vitifoliae*



### Identification

- ◆ Aerial and root form.
- ◆ Aerial form not known in western Colorado.

### Reasons for Control

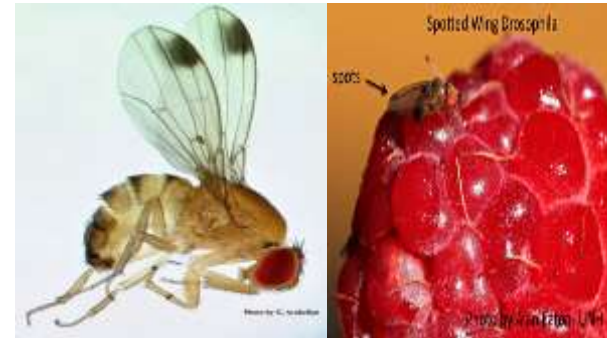
- ◆ Root form feeds aggressively on roots and causes damage.

### Control Notes

- ◆ Replace susceptible grapevines with resistant root stock.
- ◆ Sanitization is key to reducing spread of contaminated dirt by equipment, boots, etc. around and to different vineyards.

**UNMAINTAINED FRUIT TREES ARE BREEDING GROUNDS FOR PESTS THAT CAN CAUSE ECONOMIC DAMAGE TO COMMERCIAL ORCHARDS NEARBY. PROPERTY OWNERS LOCATED WITHIN THE PEST DISTRICT ARE REQUIRED BY LAW TO TREAT THEIR FRUIT TREES FOR THESE PESTS. THANK YOU FOR YOUR EFFORTS TO KEEP THE UGVPCD HEALTHY AND THRIVING!**

## Spotted Wing Drosophila *Drosophila suzukii*



### Identification

- ◆ Flies are light yellow or brown with red eyes. Dark unbroken bands across the abdominal segments. Adult male SWD has one distinctive dot on each wings along the 1st vein. Magnification is need to identify the females by their serrated ovipositor.

### Reasons for Control

- ◆ Lay eggs in fruit before it is ripe.
- ◆ Causes fruit to ripen and rot rapidly.

### Control Notes

- ◆ Management typically starts in mid-May, continuing through fruit ripening. Multiple applications of insecticides are required for complete control.

## Japanese Beetle *Popillia japonica*



### Identification

- ◆ Adults are metallic green and brownish-copper.
- ◆ Larvae are creamy white C-shaped grubs that feed on the roots of turf grass.

### Reasons for Control

- ◆ Japanese beetles are a destructive exotic pest that have been long established in the eastern US. A small infestation was discovered in Palisade in 2002 which was eradicated by a cooperative effort led by the UGVPCD.
- ◆ Adults feed on leaves, buds, fruits and flowers of many common garden and landscape plants.

### Control Notes

- ◆ UGVPCD is continuing to monitor JB populations and CDA is regulating movement of potential JB infested plants to western CO.

## Codling Moth *Cydia pomonella*



### Identification

- ◆ Eggs can be found on foliage near fruit on apples and pears.
- ◆ Larvae feed on foliage, then migrate to fruit and burrow to the core.
- ◆ Adult is a small brown moth.

### Reasons for Control

- ◆ No one likes a worm in their apple (or pear).
- ◆ All untreated fruit will be infested with codling moth.

### Control Notes

- ◆ Management typically starts in mid-May continuing through fruit ripening. Multiple applications of insecticides are required for complete control.

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***Pest species left unmanaged cause economic and environmental hardship.***  
Cooperation with pest prevention and treatment supports our local agricultural industry and protects its contribution to Mesa County's economy.

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## Greater Peach Tree Borer *Synanthedon exitiosa*



### Identification

- ◆ A pest of most stone fruit trees.
- ◆ Also called crown borer, the larvae of the clearwing moth bore into the base of the tree.

### Reasons for Control

- ◆ Trees decline in health, becoming more susceptible to disease and other pest infestations.
- ◆ Life span of tree is significantly reduced.

### Control Notes

- ◆ Once borers are inside the tree they cannot be controlled.
- ◆ Preventative basal treatment of trees in mid-June and mid-July can be effective. Timing will vary from year-to-year.
- ◆ Large commercial peach operations can use pheromone mating disruption to reduce infestation.

## Western Cherry Fruit Fly *Rhagoletis indifferens*



### Identification

- ◆ Adults are smaller than a house fly with unique black markings on the wings.

### Reasons for Control

- ◆ Flies feed and breed exclusively on cherries.
- ◆ Infested cherries are useless for market because once eggs are laid, no control of larvae is possible.
- ◆ No variety of cherry is resistant.

### Control Notes

- ◆ Since the 90s the WCFF has been a problem for cherry producers. Regular treatments are required to produce uninfested fruit.
- ◆ Sticky traps are used to time spray treatments.

The Upper Grand Valley Pest Control District is authorized to require control of certain fruit pests within district boundaries. The UGVPCD is administered through Mesa County which strives to work with land owners to help prevent and manage pest issues.

Mesa County Noxious Weed & Pest Management  
at: <https://www.mesacounty.us/departments-and-services/public-works/noxious-weeds/ugvpcd>

## Oriental Fruit Moth *Grapholita molesta*



### Identification

- ◆ The moth (adult) form will rarely be seen because of their small size, indistinct brown color, and nocturnal flight habits. Larvae feed on new growth causing flagging.

### Reasons for Control

- ◆ These two insects are wide spread pests of stone fruits in the UGVPCD. Their life histories are very similar.
- ◆ Later in the season they will feed on the surface of fruits making them unmarketable.

### Control Notes

- ◆ Backyard fruit tree growers can use post bloom sprays. Several organic and/or traditional insecticides can be effective at controlling either species.
- ◆ Commercial growers can use pheromone-based mating disruption for peach twig borer. This non-pesticide control will not work if infestation comes from outside the target orchard.