Codling Moth

Codling moth (*Cydia pomonellais*) is an insect that affects apple, pear, and walnut trees. Codling moth adults are about 1/2 inch long with mottled gray wings. You can distinguish codling moth from other moths by the dark, coppery brown band at the tip of their wings. The larvae are white to light pink caterpillars with a dark brown head. They are one of the few caterpillars likely to be found inside pear or apple fruit. The larvae cause the most direct damage to the fruit by entering the fruit and tunneling to the core, leaving holes in the fruit that are filled with reddish-brown droppings called frass. If left uncontrolled, larvae can cause substantial damage to the fruit yield, often infesting up to 90% of the fruit. Photo credit: Eugene E. Nelson.

Month	Tasks	Observations & Dates Completed
Jan - Feb	1. Prune fruit trees during dormant period to open up tree to sunlight and air circulation and removal of dead, diseased and/or damaged wood. Check out the POP pruning guide for more information on winter fruit tree pruning. remove prunings from the area because they may still be an active source of inoculum. 2. Plant apple, pear, and walnut varieties that are less susceptible to damage, such as early-maturing apples and pears and late-leafing walnuts, can greatly reduce the potential for damage.	
Mar - Apr	• Pheromone traps can be put up in mid-March. They should be hung as high as possible in the tree canopy. Check them every few days for moths. Only one trap is required if you are using them to monitor moth flights to time insecticide treatments.	
May - Jun	1. Every week or two, beginning about a month after bloom, check fruit on trees for signs of damage. Remove and destroy any infested fruit showing the frass-filled holes. Removing infested fruit before the larvae are old enough to crawl out and begin the next generation can be a very effective method for reducing the population. Thinning out the infested fruit has the added benefit of encouraging the remaining fruit on the tree to grow larger. 2. Enclose young fruit in bags right on tree. Bagging should be done about four to six weeks after bloom when the fruit is from 1/2 to 1 inch in diameter. You can buy fruit bags or use panty hose. Thin the fruit to one per cluster and wrap the fruit bag or panty hose around each fruit. 3. Remove any fallen fruit throughout the fruiting period because dropped fruit can have larvae in them.	

May - Jun (cont'd)	4. If the trees is fully infested, Spinosad, an organic-certified chemical insecticidal spray can be used. You must apply the spray to target the larva just after it hatches and before it bores into fruit, where it will be protected from the spray. This requires very careful timing. Sprays applied well before larvae hatch or after larvae bore into fruit won't be effective. The first spring generation requires three sprays applied at 10-day intervals beginning at egg hatch. For any subsequent summer generations, two sprays should suffice with the first spray applied at the beginning of each new egg hatch and the second spray applied 10 to 14 days later. No more than six sprays should be applied per season, and they shouldn't be applied within seven days of harvest. The addition of a 1% horticultural oil to the spray tank will further enhance the effectiveness of this spray.	
Jul - Nov	• Continue removing any dropped or damaged fruit.	

Resources Used:

Codling Moth Management (Washington State University) — Codling Moths In Home Orchards (University of Minnesota) — Codling Moth (University of California IPM)