



## The Backyard Orchardist Fruit Pests: Cherry

Marion Murray, IPM Project Leader • Diane Alston, Extension Entomologist

### DISEASES

#### Coryneum Blight (Shothole)

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

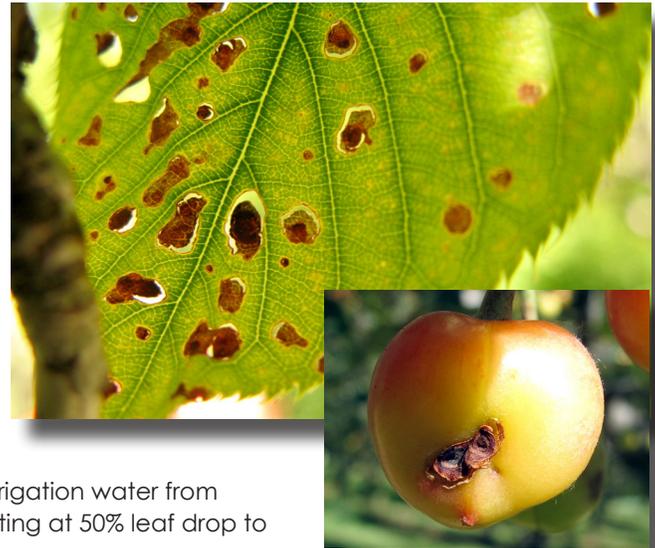
**OTHER FRUIT HOSTS:** apricot, nectarine, and peach

**GENERAL INFO:** Shothole attacks dormant leaf buds, blossom buds, leaves, fruit, and twigs (fruit infections are less common on cherry). The first visible lesions occur on young leaves as small, round, purplish-black spots. Eventually these infections fall out, leaving round holes, and giving this disease its name. Circular lesions may develop on fruit that first appear as reddish spots, and later as rough, corky bumps.

**SYMPTOMS:**

- round, purplish-black spots on leaves, holes in leaves
- reddish spots on fruit which turn into corky bumps

**MANAGEMENT:** Prune and destroy all infected plant tissue. Prevent irrigation water from wetting leaves. For severe infections, apply copper spray in fall starting at 50% leaf drop to protect newly forming buds.



#### Crown Rot and Root Rot

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

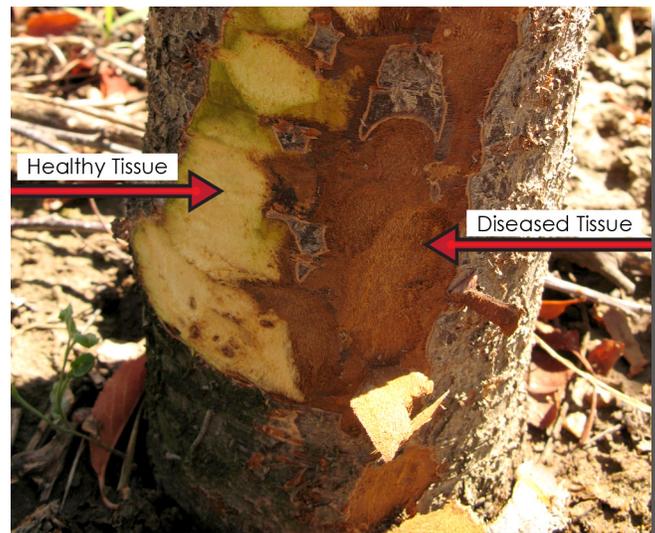
**OTHER FRUIT HOSTS:** all fruit trees

**GENERAL INFO:** Caused by a soil-borne, fungus-like organism (*Phytophthora*), crown and root rot occurs worldwide on almost all fruit trees. This pathogen is present in most soils, but only causes infection under optimal circumstances—high soil moisture or standing water, and susceptible host tissue. Once trees are infected, there is no cure.

**SYMPTOMS:**

- slow growth
- sparse, yellowing foliage
- small fruit
- wilting in hot weather
- sudden plant death
- dieback
- Can be confirmed by using a knife to expose the inner bark of the root collar. Look for dead brown tissue (infected) in contrast to cream-colored tissue (healthy) (shown at right).

**MANAGEMENT:** Plant only in well-drained areas. Do not replant in areas where root or crown rot occurred previously. Phosphorus acid (Agri-fos) can help protect healthy trees growing next to infected trees, as this disease can spread by root-to-root contact.



## Gummosis

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

**OTHER FRUIT HOSTS:** all stone fruit trees

**GENERAL INFO:** Gummosis is a general term describing the prolific oozing of sap from a tree. Gumming is produced in response to a variety of conditions, including insects, diseases, and wounding, and is most common on peach, apricot, and sweet cherry. It can also be a response to poor growing conditions, such as compacted soil.

**SYMPTOMS:**

- gumming that is clear, amber, or milky

**MANAGEMENT:** Winter injury to the trunk and limbs is a common cause of gummosis. To most accurately identify the cause of gummosis, consult your local Extension agent.



## Perennial Canker

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

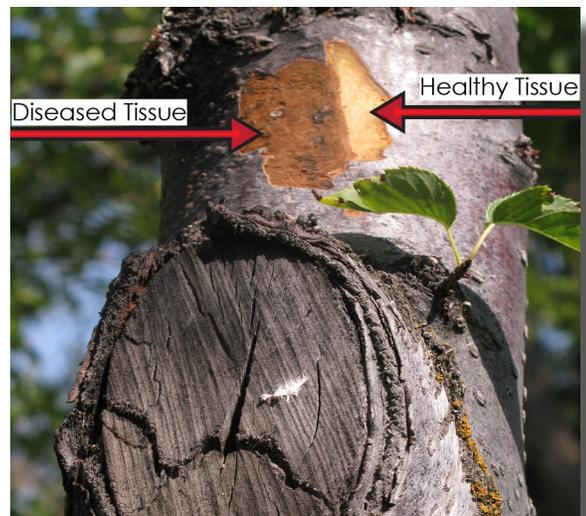
**OTHER FRUIT HOSTS:** apricot, nectarine, peach, and plum

**GENERAL INFO:** Also called cytospora canker, dieback, and sometimes gummosis, perennial canker is caused by a fungus. Cankers are areas of dead tissue on stems, limbs, and twigs that are off-color, usually oval-shaped, and usually slightly sunken. Dark amber gum may exude from the canker edges. Cankers enlarge yearly and advance down side branches. Spores spread this fungus during wet weather, and successful infections occur only in weak or wounded tissue.

**SYMPTOMS:**

- amber-colored gum
- dead branches
- loose bark
- To confirm, scrape bark to look for a distinct line of demarcation between diseased (brown) wood and healthy (cream colored) wood.

**MANAGEMENT:** Prune dead branches by cutting at least 4 inches below diseased wood. Avoid injury to trees. Control twig and tree borers since their damage may allow entrance of the fungus. Prevent wounding by sun scald.



## Powdery Mildew

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

**OTHER FRUIT HOSTS:** apple, nectarine, peach, berries, and grape

**GENERAL INFO:** Powdery mildew attacks leaves and fruit, especially in years of moisture and humidity. Infections begin in late spring, during warm days, cool nights, and some form of moisture. The spores are spread by wind, dripping dew, rain, and irrigation.

**SYMPTOMS:**

- yellowing
- distortion
- stunting
- reduced yield
- white powdery residue on leaf surface, which is a mixture of the fungal mycelium and spores.

**MANAGEMENT:** Most trees can tolerate light infections. Rake and remove leaves in fall. Fungicides (lime-sulfur, myclobutanil, or propiconazole) work as preventives.



## INSECTS

### Western Cherry Fruit Fly

**IMPORTANCE AS A PEST ON CHERRY:** high

**OTHER FRUIT HOSTS:** none

**GENERAL INFO:** Western cherry fruit fly is a common pest of cherries in northern and central Utah. Every cherry on a single tree can be infested by a maggot if populations are high. Adults are identified by a distinct banding pattern on the wings. They lay eggs by piercing through the fruit, about the time when the fruit begins to turn a salmon blush color.

**SYMPTOMS:**

- white maggots in fruit

**MANAGEMENT:** Cherry fruit fly is a quarantine pest for commercial growers so it is important for backyard growers to treat their trees to help reduce the population. Adults can be monitored with Pherocon AM (yellow sticky) traps. To prevent egg-laying in fruits, treat by 5-7 days after the first flies are detected or when fruits develop a salmon-blush color. Recommended insecticides include spinosad, carbaryl, malathion, and acetamiprid.



### Spider Mites

**IMPORTANCE AS A PEST ON CHERRY:** moderate

**OTHER FRUIT HOSTS:** all fruits

**GENERAL INFO:** Mites are very small arthropods that are more closely related to ticks than insects. Spider mites overwinter as adults at the base of trees and move into trees during hot, dry conditions in mid and late summer. They can reproduce rapidly (1-2 weeks to complete a generation). They remove chlorophyll from leaves causing a stippling appearance.

**SYMPTOMS:**

- stippled leaves
- fine silk webbing that becomes apparent when populations are high

**MANAGEMENT:** Low populations of spider mites can be ignored and are often kept in check by predatory mites. Spider mite outbreaks often follow pesticide applications that upset the predator-prey balance. Applying insecticidal soap or 1% horticultural mineral oil every 5-7 days until mite densities decline can be effective. Avoid applying soaps or oils during the hot part of the day as leaf burn may result.



### Black Cherry Aphids

**IMPORTANCE AS A PEST ON CHERRY:** low-moderate

**OTHER FRUIT HOSTS:** none

**GENERAL INFO:** Black cherry aphids suck sap from the phloem vessels and reduce tree vigor. They overwinter as black eggs on cherry trees, and hatch in spring. The backyard orchardist can usually ignore aphid infestations unless the populations are extremely high, growth of young trees is being stunted, or black sooty mold is staining the fruit.

**SYMPTOMS:**

- curled and sticky leaves
- black sooty mold

**MANAGEMENT:** Numerous beneficial insects (e.g., lady beetles, lacewings, and syrphid flies) help suppress aphid populations, so conserve and protect these natural enemies. Use dormant oil when buds begin to swell in spring.



## Flatheaded Borer (Pacific Flatheaded Borer and Flatheaded Apple-tree Borer)

**IMPORTANCE AS A PEST ON CHERRY:** low

**OTHER FRUIT HOSTS:** apple and plum

**GENERAL INFO:** Flatheaded borers are usually only a problem on drought-stressed trees and when populations are high. The larvae girdle trunks and can kill young and stressed trees and those in decline. The adult beetles are active in June and July.

**SYMPTOMS:**

- large oval holes
- twig dieback
- loose, flaking bark



**MANAGEMENT:** In addition to keeping trees healthy, apply protective trunk sprays of permethrin or carbaryl in June and July.

## Pear Sawfly (Pear or Cherry Slug)

**IMPORTANCE AS A PEST ON CHERRY:** low

**OTHER FRUIT HOSTS:** pear and plum

**GENERAL INFO:** The pear sawfly's larvae have a slug-like appearance and feed on the upper surface of the leaf epidermis. They cause a skeletonizing injury where membranous "windows" of leaf tissue remain in between leaf veins.

**SYMPTOMS:**

- skeletonized leaves

**MANAGEMENT:** The larvae are often suppressed by insecticides applied for other pests. Trees can tolerate low populations.



## Speckled Green Fruitworm

**IMPORTANCE AS A PEST ON CHERRY:** low

**OTHER FRUIT HOSTS:** apple, pear, and plum

**GENERAL INFO:** In Utah, the speckled green fruitworm is sometimes a pest of fruit trees. Young larvae hatch in spring and begin feeding on new leaves, flowers, and young fruit. They are active for approximately 6 weeks in spring and there is just one generation per year. The larvae can be detected by shaking branches over a tray.

**SYMPTOMS:**

- chewed leaves
- early fruit drop
- scarred fruit



**MANAGEMENT:** A single application of a relatively benign insecticide such as Bt (*Bacillus thuringiensis*) or spinosad, in spring after fruit starts forming, is very effective.

**Precautionary Statement:** All pesticides have benefits and risks, however following the label will maximize the benefits and reduce risks. Pay attention to the directions for use and follow precautionary statements. Pesticide labels are considered legal documents containing instructions and limitations. Inconsistent use of the product or disregarding the label is a violation of both federal and state laws. The pesticide applicator is legally responsible for proper use.

Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. USU employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Vice President for Extension and Agriculture, Utah State University.