

# DIAGNOSING TURF PROBLEMS



## BROWN PATCH (RHIZOCTONIA BLIGHT)

**Problem:** A hot-weather fungus that produces circular patches of discolored turf with a "smoke ring" of gray or purple that disappears later in the day.

**Solution:** Avoid excessive use of nitrogen before hot weather and eliminate thatch build-up. Use fungicide if necessary.



## LEAF SPOT

**Problem:** Small red ovals that develop tan centers of dead tissue with dark borders (eye spots), eventually blighting crowns and roots. Leaf spot fungi are present in most lawns, but tend to infect mowing wounds during prolonged hot, wet weather.

**Solution:** Avoid excessive early spring nitrogen application. Water infrequently and deeply. Reseed with diseaseresistant seeds. Use fungicide only in extreme cases. Avoid watering late in the day and minimize traffic to the area.



## DOLLAR SPOT

**Problem:** This fungus thrives in high humidity when soil is low in moisture and is indicated by straw-colored circles and faint cobwebby growth visible in dew-covered grass.

**Solution:** Fertilize and water regularly. Use fungicide as necessary. Avoid watering in late afternoon/evening.



## NECROTIC RING SPOT

**Problem:** A serious fungus where decomposition of thatch results in sunken or depressed areas. Difficult to control.

**Solution:** De-thatch, avoid excessive use of nitrogen in spring, aerate. Use frequent, light waterings to keep top 1/2 to 2 inches of soil moist. Frequent mulching at 2 1/2-3 inches will also help. Use fungicide if necessary before damage is too severe. Reseed with disease-resistant seed mix.



## GRAY LEAF SPOT

**Problem:** This fungus emerges in hot, humid, dry weather creating reddishbrown spots on turf. Tiny pinprick lesions quickly turn into round and oval spots that elongate the length of the leaf blade. Later, turf looks scorched and twisted. Easily confused with other diseases. Gray leaf spot progresses rapidly and large areas of turf can be lost within days.

**Solution:** Use a product with resistance to gray leaf spot.



## RUST

**Problem:** When it is hot and humid, this fungus produces orange pustules on leaf blades, giving turf an orange appearance. Rust may weaken a lawn making it vulnerable to winter kill.

**Solution:** Control with adequate fertilization and watering. Remove clippings when mowing. Use fungicide if necessary.



### ICON KEY:



**Disease**



**Insect/Pest**

**SUMMER PATCH**

**Problem:** This root-infecting fungus emerges during hot, humid or wet weather in stressed turf in poorly drained soil. Easily confused with other diseases, it appears similar to necrotic ring spot.

**Solution:** The best solution is to establish diseaseresistant grass, aerate and assure good drainage. Use slow-release nitrogen fertilizer and deep irrigation. Fungicides will need to penetrate roots.


**BILLBUGS**

**Problem:** Larvae eat grass blades resulting in small, dead patches that look like dollar spot. To diagnose, pull up turf. If stalks break easily at ground level and stems are hollowed out or packed with sawdust, billbugs may be the reason.

**Solution:**

Billbugs are difficult to destroy because they have armor-like bodies and do not readily absorb insecticide. The best way to treat billbugs is to avoid them altogether by selecting insect-resistant seed blends.


**CHINCH BUGS**

**Problem:** Larvae that suck the plant juices from grass, producing yellow patches in lawn. To diagnose, spread grass and look for small red and black bugs.

**Solution:** Regular watering often eliminates chinch bugs. If not, spray with insecticidal soap every two or three days for a week or so. If you resort to heavy artillery, try bifenthrin pesticide. Chinch bugs will return every year. Control in late spring may reduce populations to non-damaging levels.


**CUTWORMS**

**Problem:** Gray or dull brown fat caterpillars that destroy young plants by cutting them off at the soil line.

**Solution:** Implement treatments with an insecticide as soon as cutworm activity is noticed and before substantial losses occur.


**ICON KEY:**

**Disease**

**Insect/Pest**
**SOD WEBWORM**

**Problem:** The adult moth lays its eggs in turf. Caterpillars emerge in early spring, tunnel under thatch by day and eat grass blades at night. Damage appears as small dead patches in lawn, typically on sunny, steep slopes where it is hot and dry. Often mistaken for heat/drought stress.

**Solution:** Select an insect-resistant seed blend. Fertilize and water and you may not need to use insecticides that can also destroy natural predators of sod webworms.


**DROUGHT OR HEAT STRESS**

**Problem:** During periods of prolonged hot weather, surface soil can harden, making moisture penetration increasingly difficult. Without moisture, the roots cannot carry nutrients to the grass. The weaker the turf becomes, the more likely it will be overtaken by weeds and disease.

**Solution:** A wetting agent or surfactant will help break down the barriers that repel water and allow it to enter the soil. Water 4 inches per week to minimize damage.


**DOG SPOTS**

**Problem:** Brown circles that resemble dollar spot or brown patch. Caused by dog urine.

**Solution:** Heavy watering will dilute excess salts and allow grass to recover. Overseeding may be necessary.


**ROUNDUP® SPOTS**

**Problem:** Roundup® is a non-selective herbicide- it will kill any plant it comes in contact with, including turf grass.

**Solution:** Reseed areas where spots have developed due to Roundup® use.


**WEAR AND TEAR FROM PLAY**

**Problem:** Compacted soil and bare spots under playground equipment or along unpaved paths.

**Solution:** The best solution is to aerate and reseed with seed blends designed to withstand high traffic or wear and tear.

