



Brown Spots in the Lawn

Brown spots are one of the most frustrating lawn problems. If you can discount an obvious source -- dog urine, for example -- the spots seem to appear out of nowhere and it's difficult to figure out what caused them. Here are some common reasons lawns turn brown in our area.

- Unsharpened mower blades shred the tips of grass plants, allowing them to dry out rapidly. This quickly creates a brown appearance, especially during warm weather. Sharpening the blades corrects the problem.
- Scalped areas turn brown because they're not mowed correctly. Scalping occurs when the mower runs over an uneven lawn, removing excessive grass from the tops of high spots. Soil, then turf, dries out because little grass canopy remains to protect it against the sun's heat. Try raising the mowing height in these places to reduce the problem.
- Soil compaction, the tight packing together of soil particles, restricts root growth. If roots don't grow, neither do the tops. Heavy clay soils, with which our region is blessed, naturally tend to be compacted. Foot and equipment traffic, heavy rain and irrigation can also cause or worsen compaction. Sometimes compaction symptoms appear only in localized spots, sometimes the entire lawn suffers. Check for soil compaction by inserting a long screwdriver or rod into the troubled spots. If you feel resistance, suspect compacted soil. Core aeration, in the spring, fall or both, can help relieve it.
- Buried debris, such as rocks, bricks or lumber, often produce brown spots. The amount of soil covering these objects often is too shallow for good root penetration. Because the roots don't have sufficient area to explore for water, they, and then the grass, dry out. Probe the soil with a long screwdriver or dig in the affected area to determine if this is the cause of the problem and remove it.
- Thatch, a spongy layer that develops between grass plants and the soil, creates localized dry spots if it's thick enough. Water, oxygen and fertilizer movement decreases under thatch, injuring roots. Dead grass stems and roots are the main components of thatch, and they don't decompose quickly. When they accumulate faster than they can be decomposed, a thatch layer forms.

Several conditions can cause this. Today's grass cultivars are quite vigorous. This feature enables them to recover quickly after environmental stresses and human/animal injuries. But the same vigor contributes to the development of many shoots and roots, which ultimately contribute to thatch. Excessive amounts of nitrogen and water also stimulate shoot growth, contributing to thatch. Microorganisms that might decompose thatch are unable to survive or perform well in our poorly aerated clay soils. Without the microorganisms to break it down, thatch accumulates.

To determine if thatch is present, cut out a pie-shaped section of turf and soil. Look for a brown, spongy layer between the soil and grass. If it is a half-inch or less, don't be concerned. Some thatch is needed for insulation and resiliency. But if it exceeds a half-inch, then it should be managed by core aeration. This process pulls plugs of soil out, which changes the physical composition of the thatch. Eventually, air and water movement into the soil increases, improving root development. Core aerating can be performed in both spring and late summer/early fall. At least one treatment per year is recommended.

- Sloped areas also are prone to browning. Water usually runs off the slope before it has had a chance to sink in and the lawn dries out. Aerating the sloped areas helps move water into the soil. It reduces soil compaction, which resists downward water movement. Irrigating slopes with a soaker hose adds water slowly and may improve its penetration.
- Tree roots compete with grass roots for water. One solution is to water the competitive areas more often or more heavily to compensate for the loss. In the long run, it might be simpler to remove the grass altogether from this difficult site and replace it with an organic mulch.
- Hot exhaust can also produce brown spots, especially if the mower is left running in place on the turf. Gasoline and oil spills cause sudden death of grass plants; so can objects left on the lawn during sunny weather.

Walls and hot pavement can reflect the sun's heat onto nearby grass causing it to dry and brown. Soaking these areas more frequently helps replace lost moisture.