



# COMMON PROBLEMS IN DESERT LAWNS

STARNOTE 815  
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## *Symptoms, Causes and Solutions*

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In spite of attempts to change it, we still live in the desert! A healthy patch of grass is pleasing to most of us, but needs time, water and effort to keep it that way. The severe environmental stresses placed on grass, even heat-adapted, low-water varieties, often results in insect and disease problems which can ruin a lawn's appearance and destroy large sections of turf.

Diagnosis of lawn problems is often complex and highly technical. Making the correct call based on customer description or small sample is difficult and not always possible. Fortunately, it is possible to reduce the main sources of trouble to a short list. A maintenance program which addresses each main trouble source will have a good chance of producing a healthy, vibrantly green lawn.

Here are the most common lawn problems with causes and solutions. They are listed in order of most to least common. Keeping a beautiful, healthy lawn may be expensive and time-consuming, but so is keeping a sickly one. Follow these guidelines, become familiar with products and procedures and you can have a lawn that's the envy of the neighborhood.

### **INADEQUATE SPRINKLER COVERAGE**

**Symptoms:** ➤ Patchy growth; some areas green, some brown, some growing more vigorously than others. ➤ Symmetrical brown or stressed patterns in grass that don't increase in size ➤ Visible lines or circles in turf ➤ Brown areas around sprinkler heads

**Causes:** Clogged sprinkler nozzles; broken or leaking pipes above or below ground; improper sprinkler head spacing; different kinds of heads on one circuit resulting in uneven pressure; too many heads on one circuit resulting in insufficient pressure; heads turned the wrong way; heads loose on risers.

**Solution:** Troubleshoot your entire irrigation system periodically and keep all parts in good working order. Check sprinkler coverage by placing flat-bottom dishes or cans in trouble areas and healthy areas; run your system and check the collectors. All should have the same amount of water. Adjust your system or add heads as needed to insure even coverage. Another method is using a moisture meter to check soil moisture content in various parts of the lawn. All levels should be approximately the same. Check our on-line Tip # 1052 Quick irrigation check.

### **OVER OR UNDER WATERING**

**Symptoms:** Over watering: Lawn grows too fast and begins to yellow in spite of fertilizer use; uneven growth in mixed grass lawns; patches of lawns wither and die out. Under watering: Lawn has grayish appearance (easily seen with sunglasses) with curled grass blades or straw colored grass mixed in lawn. Lawn declines after fertilizer application; footprints remain visible after walking on grass.

**Causes:** Too much or not enough water for the grass variety, soil type and season. Over watering can also lead to fungal diseases which can cause unhealthy looking or dry patches to appear.

**Solutions:** Read Star Note # 900B How Much should you water your lawn? This "watering calendar" has been tested and proven effective in our climate. Minor alterations may be necessary depending on your elevation, grass variety and soil type. During the hot months, water between the hours of 3 - 5 AM to maximize soil penetration and minimize evaporation. Remember, if watering more than once a day, conduct multiple lawn waterings one hour apart.

## **BUILDUP OF DEAD GRASS (THATCH), SOIL COMPACTION OR UNDERGROUND OBSTRUCTIONS**

**Symptoms:** Overall thinning of lawn or thin patches; areas that show signs of under watering soon after water is applied; areas of standing water; areas that don't respond properly to fertilizer. Newly planted grass browns out then dies in the same spots, regardless of water application.

**Causes:** Buildup of dead grass or grass clippings; compacted soil due to poor preparation or foot traffic; underground obstructions due to construction debris, rocks or caliche which prevents grass from rooting deeply enough..

**Solutions:** Every two or three years de-thatch the lawn (fall is best), using a rake, a thatching blade attachment for your lawn mower or rent a power rake available from local rental centers. If using a mulching mower, mow more frequently. Longer, coarser clippings decompose slowly and cause thatch buildup. Aerate the lawn regularly using a hand or mechanical aerator. Top dressings of organic material twice a year will loosen heavy clay soils and relieve compaction. Probe repeated problem spots with a long screwdriver to locate obstructions; remove them and replant. At least 1 foot of unobstructed soil is needed for grass to grow properly in hot weather.

## **EXCESSIVELY ALKALINE OR MINERALIZED SOIL**

**Symptoms:** Lawn pale and stunted with no response to fertilizer; dead patches that won't regrow; thin areas with burned grass tips; white, powdery or crusty stuff on the soil surface.

**Causes:** Our soil is often too alkaline for proper lawn growth; patches of bad soil caused by excess mineral deposits such as boron or selenium or human activities like oil changes, painting or dumping of solvents. Frequent, shallow watering keeps salts in solution around roots, flushes away nutrients, stresses roots and results in dying, burned or stunted growth. Many fertilizers don't work if the soil is too alkaline, and can further damage your lawn.

**Solutions:** For a new lawn from seed or sod, prepare the soil correctly. See Star Notes #800, *Planting a New Lawn from Seed*, and #805, *Planting a New Lawn from Sod*, for complete information. For established lawns, investigate the soil in non-responsive patches; replace if necessary. Try organic, amino acid-based fertilizers like *Royal Flush™* to help neutralize the alkali, or try a liquid alkali control like *Con-Grow*. Water longer but less frequently; top dress problem areas twice a year with organic soil conditioners. Use the correct fertilizer for the season – See Star Note #810 *Fertilizing & Maintaining a Lawn* or see your friendly Star Nursery consultant.

## **INFESTATION BY INSECTS OR DISEASE**

**Symptoms:** Irregular patches which slowly spread, sometimes resulting in complete loss of grass in affected areas. Patches may be ringed by a band of wilted or discolored grass. Areas have pale or freckled grass blades.

**Causes:** Fungal diseases, grubs and other insect larvae, cinch bugs and leafhoppers. The most common fungal diseases we see are **Brown Patch**, **Leaf Spot**, **Grease Spot** (Pythium Blight) and **Patch Disease** (Fusarium Blight). Over watering, improper fertilization, thatch buildup and watering at the wrong time all contribute to these problems.

**Solutions:** Don't water between the hours of 7 PM and 2 AM- -summer rains can cause problems in spite of your efforts. Cut soil plugs to check for grubs; take grass samples to your Star Nursery associate for help. Use a broad-spectrum fungicide to control most diseases. Follow package directions exactly! *Bayer Multi-Insect Killer Granules* will control most lawn insects. To keep your lawn healthy, correct deficiencies in watering, thatching and fertilizing practices.