WHAT IS WRONG WITH MY LAWN?

UMass Extension
CENTER FOR AGRICULTURE

Lawn problems can occur in small areas or larger patches and entire lawns can be affected. Sometimes the problems are due to poor growing conditions, improper lawn care practices, or extreme weather conditions. Other problems can be due to specific insect pests or diseases.

The following is a guide to help you decide what conditions might be causing problems, with some suggestions for preventive and corrective measures.

AFTER WINTER, BUT BEFORE SPRING GREEN-UP:

Problem	What to Look For	What to Do
Winter desiccation	Large areas of straw-colored grass especially where exposed to wind with little snow cover.	In fall: ▪ Discourage snow molds by mowing as long as grass grows in the fall. ▪ Avoid mid-fall nitrogen applications that delay dormancy. ▪ Prevent deep piling of snow along walks and driveways. In winter: ▪ Try sand, cat litter, etc. as substitutes for deicing salt. ▪ Avoid salt when possible in sensitive areas. In spring: ▪ Rake away dead grass. ▪ Re-seed thinned or bare areas when soil is well drained and warm, with night temperatures above 35° F. ▪ Water heavily to flush the soil if damage is from salt.
Spring frost damage	New leaves killed back.	
Water and ice damage	Straw-colored or rotted grass, especially where water collects on frozen soil.	
Snow molds	White, pink, and gray mold in circular patches on moist grass.	
Salt damage	Dead or yellowed grass along sidewalks, driveways, or roads where salt has been applied.	

AFTER SPRING GREEN-UP:

Problem	What to Look For	What to Do
Compaction	Soil is hard; turf is thin. Rooting is poor.	▪ Core aerate the soil, allow cores to dry, and drag back in. ▪ Overseed with appropriate grass species. To avoid crabgrass infestation, delay core aeration until late summer/early fall. ▪ Add organic matter during lawn reconstruction. ▪ Reroute foot traffic and play areas to avoid frequent packing down of soil.
Acid or alkaline soil	Poor growth. Soil test indicates inappropriate pH for grass growth. The pH should be in the 6.0-6.5 range.	▪ Have soil pH tested. ▪ Adjust pH as recommended
Low nutrient levels	Yellowed, slow growing lawn.	▪ A balanced soil fertility program supplying nitrogen, phosphorus, and potassium (N,P,K) promotes a healthy lawn. ▪ Have soil pH tested. Adjust pH if necessary.

WATER PROBLEMS:

Problem	What to Look For	What to Do
Too little water	Wilt (blue-green color and foot prints easily visible), browning, death. Some turfgrasses (e.g., Kentucky bluegrass) will go into dormancy in drought but will green-up again when moisture returns. This type of dormancy imposes stress on the turf, and weakens its defenses against pathogens and other stresses.	▪ Water deeply (to a depth of 6") when necessary. ▪ Water early in the day so foliage will dry quickly. Night watering (after dew appears) is not recommended during very hot, humid weather be-cause of potential for disease development.
Too much water	Deprives roots of oxygen, stunts growth, and promotes root and crown rots.	▪ Water less frequently. ▪ Correct drainage if necessary.

MOWING PROBLEMS:

Problem	What to Do
Mowing height	▪ Mow lawns at 2.5” to 3.5”. ▪ Avoid “scalping,” especially in irregular, bumpy areas.
Mowing frequency	Remove no more than 1/3 of the total leaf area at a cutting so grass is not stressed.
Clippings	Can generally be left except during a disease outbreak or if they tend to clump on the lawn.
Machinery	If grass blades look brown and shredded, sharpen and adjust blades.

DISEASE PROBLEMS:

Problem	What to Look For	What to Do
Circular patches and/or rings of dead and/or unusually green grass	▪ Note size and patterns. ▪ In the morning when grass is still dewy, look for the web-like threads of the fungus and/or mushrooms on the lawn. ▪ Dig up a section of dying grass, and examine the roots for dark color and evidence of rot and crown rot.	General practices that reduce disease: ▪ Keep foliage dry as much as possible. ▪ Mow when grass is dry. ▪ Landscape to allow good air circulation. ▪ Collect clippings when fungus is active in lawn. ▪ Avoid nitrogen fertilizers early in spring, in hot weather, and just before grass becomes dormant. ▪ Choose disease resistant cultivars when possible.
When grass is thin or dead in an irregular area	Examine individual grass blades for: ▪ Leaf spots (probably tan with dark borders) ▪ Evidence of fungus; orange, black, or powdery white spores. ▪ Gelatinous red threads ▪ Slimy or powdery white, orange, or brown mold.	

INSECT PROBLEMS:

Problem	What to Look For
White grubs	Gradually increasing patches of thin turf, often looks like drought stress. Turf may pull out at the roots. Sometimes accompanied by skunk, raccoon, or crow damage (lawn torn out in hunks). Usually observed in April and May (or early June) or September or October. Animal damage may persist through open winters.
Chinch bugs	Generally observed in sunny areas or on sandy soils. Often confused with drought stress. Usually observed during hot periods in July and August.
Bluegrass billbugs	Damage usually begins as yellow areas along the edges of driveways and sidewalks, usually observed in July or early August. Later, turf may detach at the crowns when pulled. Adults may be seen on pavement in late May or early June.
Sod webworms	Adults are small moths that fly just above the ground at dusk. Damaged areas begin as small discrete patches which can spread into larger areas. Feeding (by caterpillars) occurs at night.

ADDITIONAL PROBLEMS:

Problem	What to Look For	What to Do
Shade	Most lawns will be thin in shaded areas.	▪ Selective pruning of tree and shrub branches may let in enough extra light to promote grass growth. ▪ Plant shade tolerant turfgrass cultivars or other groundcovers. ▪ Increase mowing height. ▪ Decrease fertilizer application rate.
Too much thatch	Thatch forms when stems (including lateral stems: stolons and rhizomes) and roots are produced and then sloughed off by the turfgrass plant faster than they can break down. Highly maintained turf heavy in Kentucky bluegrass tends to develop thatch quickly. Clippings left on a lawn do not contribute significantly to thatch build-up.	▪ Remove thatch layer if greater than 1/2" thick be-cause excessive thatch prevents grass plants from absorbing nutrients and water properly, and may provide a harbor for pathogens and insect pests. ▪ Prevent accumulation of thatch by avoiding excess fertilizer and pesticide applications.

ADDITIONAL PROBLEMS (continued):

Problem	What to Look For	What to Do
Improper fertilizer application	Brown streaks lined with extra green growth can occur in areas of application overlap. Yellow nutrient deficient streaks may occur in missed areas.	Over-and under-fertilizing can result when the spreader is not calibrated properly or when the application pattern is not carefully followed. Take special care when turning spreader.
Dog urine	Spots of brown grass, perhaps with extra green growth around them.	Little can be done to prevent damage. Keep dogs away from turf area if possible. Maintain a healthy and vigorous lawn.
Foreign chemicals and gas damage	Sudden scorched areas of turf	Can be caused by many household chemicals such as salt, oil, gasoline, concentrated fertilizers, and herbicides. Take special care when using these products around turf areas. Check for leaks on mowing equipment, etc.

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