

Lawn Problem Diagnostic Guide

Step-by-Step Decision Tree for Brown Spots, Yellowing, Thin Areas & Other Common Failures
Professional Troubleshooting Adapted for Cool-Season Home Lawns

When something goes wrong, resist the urge to immediately apply a product. Proper diagnosis saves money and prevents making the problem worse. Use this guide as your first step.

Step 1: Describe the Symptom Accurately

- **Brown / dead spots in patches:** could be grubs, fungus (brown patch, dollar spot), dog urine, chemical burn or compaction.
- **Yellowing / chlorosis:** often iron deficiency (high pH), nitrogen deficiency or poor drainage.
- **Thin / sparse areas:** shade, compaction, thatch, weed competition or the wrong grass type.
- **General decline / slow growth:** soil issues, over- or under-watering, or chronic low fertility.
- **White / powdery coating:** powdery mildew (shade) or heavy dew + disease pressure.

Step 2: Quick Field Tests

Tug Test for Grubs: Grab a handful of turf in the affected area and pull upward. If it comes up like a carpet with no roots attached, grubs (or other root feeders) are likely. Check 3–4 spots. Threshold: 10–15 grubs per sq ft in many cases, but healthy turf can tolerate more.

Look for Patterns: Straight lines or geometric shapes? Often equipment, a chemical spill or an irrigation issue. Random patches? More likely biological (insects, disease). Along sidewalks and driveways? Heat stress, de-icing salt or compaction.

Check the Thatch Layer: Cut a small wedge. Thatch deeper than 1/2 inch restricts water and oxygen and harbors disease.

Common Problems & First Actions (Cool-Season Lawns)

Problem	What it looks like / first action
Brown patch (Rhizoctonia)	Circular patches with a smoke-ring look in hot, humid weather. Tall fescue and bluegrass are susceptible in summer.
Dollar spot	Small silver-dollar-sized spots, often in low-nitrogen or thatchy lawns during mild, wet weather.
Grubs (Japanese beetle, etc.)	Tug test positive. Peak damage late summer/fall. Beneficial nematodes or a targeted insecticide if the threshold is exceeded.
Nutsedge	Yellowish, triangular stem, grows faster than the grass. Not a grass but a sedge: needs sedge-specific herbicide + cultural control (improve drainage).
Compaction / poor drainage	Water stands, roots stay shallow, moss appears. Core aeration + topdressing is the long-term fix.
Iron deficiency (high pH)	Yellowing between the veins on newer leaves, especially in alkaline soils or after heavy lime. Chelated iron spray gives quick green-up while you adjust pH long-term.

Pro Tip: On golf courses we diagnose before we treat. The same discipline at home prevents the 'spray and pray' cycle many homeowners fall into. When in doubt, take photos, note recent weather, fertilizer and mowing changes, and cross-reference with the full article library on the site.

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