

Soil Sense

Good soil grows healthy grass. Squeeze your soil; desirable loamy soil (abundant in organic matter and minerals) stays together, but falls apart easily upon poking. Sticky clay and loose sandy soils are less friendly to grass, suffering aeration and moisture or drainage problems. Spreading compost—which is good, clean, easy-to-use organic matter—will help clay or sandy soils become more hospitable. If you have weed or disease problems, learn your soil's chemistry. Grass wants a slightly acidic soil (pH 6.5-7.0) to absorb nutrients. Most garden supply stores offer home-testing pH kits. If your soil is too acidic, sweeten it with limestone following guidelines available at nurseries or extension offices. If your soil is too alkaline, sour it with sulfur. For a more complete, reliable analysis use a private lab (GMS Labs at 877-315-6007 sells \$13 kits available by mail or at Casey's Garden Shop in Normal; Sparks Soil Testing 217-735-4233) or the cooperative extension office. These test for pH, phosphorus and potassium, supplying specific recommendations to correct imbalances (request organic rather than synthetic solutions).

Kid-Safe Weeding

What's a weed? Society's perception changes, and a flower today may be considered a weed tomorrow. Clover and dandelions are good examples. Weed-free lawns are unnatural and impossible to achieve without the use of harmful chemicals. Instead, decide just how many uninvited guests you'll tolerate, and learn to live with them. If you're up to 25% weeds, experts recommend action. Weeds often thrive in conditions inhospitable to grass: heavy use, soil compaction, improper fertilization, drought, and short mowing.

Fix the problems not the symptoms. In the mean time, grab some good hand tools and pull, cut, dig or mow the unwelcome intruders. Before the weeds flower and set seed, get as many and as much as you can, including the root. It really works. It's perfectly safe and perhaps therapeutic. If you absolutely can't muster the muscle to hand weed, squirt spray only individual plants, sparing the rest of the lawn. Follow label instructions and keep kids, pets, neighbors and everyone else off.

See our Brochure on Organic Yard Products for more information.

Pests

Most insects don't damage grass, and many are even helpful. If you have an insect problem, turf scientists suggest first addressing mowing, fertilizing, watering and thatch issues. If you are patient this works most of the time. If you need more help, don't reach for the poisons yet. The Master Gardeners of Cooperative Extension recommend using Integrated Pest Management (IPM). This approach teaches us to: 1) identify the pest (local cooperative extension offers insect and plant disease identification for a small fee 309-663-8306); 2) determine the damage 3) implement organic treatments—mechanical trapping devices, natural predators, insect growth regulators (pheromones), mating disruption and natural chemical pesticides, borax, soap; and 4) use synthetic pesticides only as a last resort, starting with the least toxic. Chemical labeling advises on acute toxicity (but not necessarily chronic): Warning is least poisonous, Caution more poisonous, and Danger, most poisonous.



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Common Sense Lawn Care



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recommendations at
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Good Grass

Choose low maintenance grass types suited to local conditions, resistant to pests, weeds, disease and drought. Kentucky bluegrass is still king in the humid Illinois climate, but cool-season varieties once native to prairies and pastures have gained favor, including chewing fescues, tall fescues, and improved perennial ryegrasses. Each variety has numerous strains and hybrids, each boasting specific attributes (e.g., shade tolerance, disease resistance, weed control). The best grasses for you depend on many factors, including how you use the yard. Consult with organic lawn care books, local experts or successful ecologically-minded homeowners with similar lawn conditions.

Minimal Watering

Grass plants don't like to work harder than they have to. If water is readily available on the soil surface (due to daily watering, and heavy rains) the roots won't probe deep into the subsoil for moisture. Pampered grass with shallow roots will suffer in a dry spell. Grasses, like Kentucky bluegrass, handle the heat and dryness of summer by going semi-dormant. You harm more than help by forcing them out of hibernation by watering. Only water grass when it begins to wilt from dryness (when color fades and footprints stay compressed). Then, thoroughly drench the lawn, soaking 1" of water the full depth of the roots, perhaps 6-8" deep. Never let the flow rate of the sprinkler exceed the infiltration rate of your soil. Water after the dew has dried in the morning to prevent disease, but before the heat of the day which speeds evaporation so less water reaches the roots.

The Art of Mowing

Grass does not want to be mowed. It prefers to grow tall (maximizing the blade's food-producing photosynthesis), to mature and set seeds. Cornell University turf grass expert Norman Hummel says mowing is a violent, physical removal of living tissue that shocks the plant by suddenly amputating its food source. Additionally, chopping the blade encourages side shoots and creates ports of entry for disease. Skillful mowing creates a compromise between your needs and your grass'. Mow high and often to minimize plant trauma, while encouraging deep roots. Kentucky bluegrass, tall fescues, and ryegrass should be cut to 3" (bentgrass and Bermuda grass can tolerate shorter cuts). Taller grass also helps shade out weeds, prevents soil from drying out, and encourages deeper roots.

Cut no more than 1/3 of the blade at a time to minimize tissue damage. Short clippings return nitrogen to the soil, but exceptionally long clippings can choke the lawn with thick thatch. Time mowing by grass length, mow less often in hot, dry weather, and cut your grass with a sharp blade to minimize damage.

See the EAC's Mowing brochure for more information

Minimize Thatch

Thatch is a buildup of mainly creeping stems and roots, with some matted clippings on. When less than 1/2" deep, thatch beneficially mulches offering insulation, soil cooling and moisture preservation. But a thick thatch keeps out water, air, and fertilizer, harboring insects and promoting disease. While over-watering, compaction and improper mowing contribute to thick thatch, chemical use is the main culprit.

In a healthy lawn, earthworms and microorganisms (bacteria, fungi) decompose thatch rapidly (within a week) releasing nutrients into the soil. Chemical dousing often makes soil life inhospitable to these essential organisms. Raking (try a thatch rake) and aerating (poking tiny holes in the soil) can loosen the soil to help it breath and assist thatch decomposition. Earthworms are the prize thatch-busters, and lawns with a good supply have no thatch problem.

Natural Fertilizing

Don't make your lawn dependent on chemical fertilizers. Eliot Roberts, director of the Lawn Institute informs us that heavy chemical fertilizer will literally grow the grass to death. This rapid growth makes it susceptible to disease. In addition, synthetic fertilizer acidifies and salts the soil. Natural fertilizers help maintain a neutral pH, invite slower growth, deeper roots, more realistic greening, and help earthworms and soil bacteria thrive, making more nutrients available to grass. Additionally, they protect your water supplies from carcinogenic nitrogen by-products.

Light grass clippings offer free fertilizer. Within just two weeks, nitrogen from clippings emerges in new grass. Supplemental organic fertilizers include dehydrated cow manure, dried poultry manure, fish emulsion, bloodmeal, or cottonseed meal. Add clover and other nitrogen-fixing plants to your lawn seed mix for self-fertilizing.