



# AGRI-FACTS

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## Lawn Care Tips

A healthy lawn contributes to your property value and the overall appearance of your neighborhood. It provides a natural, safe surface where your family can play and relax. By following a few simple tips, you can keep your lawn healthy and environmentally beneficial.

### Mowing

Mow high, preferably 2.5 to 3 inches. Mowing short weakens the root system and gives weeds a chance to compete with the grass. When the mower is higher the clippings don't clump. As a general rule experts say to remove only one third of the leaf with each mowing. So if you mow to 3 inches, you can let the grass grow to 4.5 inches. If you mow at 1.5 inches, you'll need to cut when the grass grows to 2.75 inches. The shorter you mow, the more frequently you'll need to mow your lawn to keep to the "one third" rule. The longer between mowings, the more likely clippings will have to be picked up.

Mow in different directions and alter the pattern each time if you can. For example, go north-south, east-west, clockwise, counter-clockwise, diagonally, and so forth. This will cut more leaf surface on weeds that may tend to lean in the direction of mowing and may help the grass compete with them. It also reduces soil compaction and turf wear from the wheels.

Sharpen your mower blades at least once a year. Dull mower blades tear-off rather than cut grass blades. The torn leaves give the lawn a whitish cast and may leave it more vulnerable to disease problems.

Return the clippings. If you only cut one third of the leaf under dry conditions, the clippings will fall evenly on the soil surface. A mulching mower will further chop-up the clippings, which will help speed-up the decomposition process. Grass clippings are about 85 per cent water and don't contain lignin. The soil

microbes are able to breakdown leaf clippings more readily than they can decompose thatch (see the section below). During the summer, clippings decompose and return nitrogen and other nutrients to your lawn. The decomposition is slower in cool weather. So the further north you live, the more you'll need to monitor the build-up of clippings. If the surface starts to feel too spongy, you may need to put the grass catcher back on your mower and give nature a chance to catch up with the decomposition process. You don't want the clippings layer to be more than 1/2 inch thick. If you tend to over-fertilize or apply insecticides and fungicides, you might have problems if you don't remove the clippings.

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Reduce or eliminate the need to trim around the edges of your lawn. Keep shrub and flower beds level with the lawn so you can overlap with the mower. Design your lawn to eliminate tight corners and pockets where your mower won't fit. Don't run the lawn right up to fences, trees or buildings. Maintain a mulched or cultivated area between the lawn and these objects. With some easy changes, you should be able to cut the whole area with your mower and leave the trimmer in the shed.

### Watering

Water infrequently and deeply to encourage deep roots. It's difficult to say how much water to apply since it depends on soil type, species of grass, mowing height, temperature, wind, and other factors. Measure rainfall and sprinkler water with a rain gauge or a container with straight vertical sides, such as a coffee can or a tuna can. Generally, one inch is considered an adequate soaking. High spots and south-facing slopes will need more water than other areas. Apply less water in shady areas that receive less than 4 hours of direct sunlight daily. Grass under large trees will need more water since the tree roots will consume water and the tree canopy may intercept rainfall.

Early morning watering is ideal. Less water is lost through evaporation and wind. Watering in the evening leaves the lawn wetter longer and increases the likelihood of disease problems.

Your lawn may become brown during hot, dry spells. It's in a dormant state and will green up again when wetter, cooler weather returns. A healthy lawn can survive several weeks in a dormant state.

## Pests

A healthy, vigorous, dense turf is the best defense against invasion by weeds and other pests. Check your lawn regularly to catch problems early. Usually the presence of a few insect pests or weeds is not cause for concern. Insects rarely damage healthy lawns in Alberta. Most insects you'll find in your lawn will either not be a problem or may even be beneficial. If you're concerned that insects may be causing damage, consult a lawn care professional.

If you have just a few broadleaved weeds scattered throughout your lawn, consider removing them manually before they produce seed heads. If you choose to use herbicides, spot spray the weeds rather than treating the whole lawn. Avoid using weed bars or weed and feed products. Always read product labels and wear protective clothing when using herbicides.

Turf diseases are easily confused with other problems such as dog urine, fertilizer burn, dull mower blades, road/sidewalk salt, compacted soil or fertilizer burn. Fungicide applications are almost never warranted on home lawns in Alberta. A lawn consisting of a blend of various Kentucky bluegrass cultivars mixed with some creeping red fescue will resist diseases well. If a disease occurs, some plants in this mixture may be susceptible but most others will be resistant.

Fairy ring is the home lawn disease that most frequently causes concern. It causes a circular or semi-circular ring, varying from a few inches to 50 feet or more in diameter, of dark green grass, which may die over time. Mushrooms often follow the ring pattern, particularly in spring and fall. If it's not severe, you can mask the problem with an application of nitrogen fertilizer. Spiking the area just outside the dead ring with a garden fork then soaking it with soapy water and keeping it soaked with hose water may help lessen the problem. A more drastic solution is to remove the soil 18 to 24 inches in front and behind the dead ring to a depth of 12 to 36 inches (depending on the development of the fungus).

## Fertilizing

Ideally, a home lawn only needs to be fertilized when nutrient levels drop below what's needed to maintain it in a healthy condition. Compost will add organic matter and provide the major and minor nutrients in a slow release form. Organic fertilizers such as activated sewage sludge or steer manure also supply all the nutrients needed for healthy growth.

Inorganic commercial fertilizers usually contain the three major nutrients: nitrogen (N) to promote leaf growth and dark green color, phosphorous (P) for root growth, and potassium (K) for stress resistance. The three numbers on the bag represent the percentages of each of these elements – always in the order “N-P-K”. Unless the instructions say otherwise, inorganic, commercial fertilizers must always be watered-in after they have been applied. Otherwise, you'll burn your lawn.

The type of grass, type of soil, age of the lawn, weather conditions and other factors mentioned above, such as returning clippings and watering frequency, will all determine rates and timing of fertilizer applications. A soil test by a professional laboratory is the only sure way to access nutrient needs accurately.

## Repairing weak spots

A healthy lawn will usually repair itself. With proper watering and fertilizing, thinned areas, small gouges and dead spots will fill in. Kentucky blue grass turf thickens quicker after damage than other less aggressive species such as creeping red fescue. That's why turf professionals use it for golf tees and playing fields that suffer frequent damage.

You can repair larger dead patches by reseeded. Mix grass seed into compost or soil in a container such as a bucket. Then spread the mixture over the dead spot. Lightly pack it by stepping on it but make sure it's dry before you do so (you'll pack it too much if it's wet). Then keep the area watered until the seedlings become established.

If the bare patch is in a high traffic area, you may prefer to replace the dead grass with new sod. Cut out the dead sod to about an inch deep, rake the soil, place the new sod and firm it by stepping on it or rolling it. Then keep it well watered until the new sod is established.

## Thatch

Thatch is a layer of dead and living shoots, stems and roots that builds up between the green vegetation and soil surface. Because it has high lignin content, it resists microbial breakdown. Thatch will accumulate if the growth of the crowns and lateral stems (rhizomes) exceeds their decomposition. If thatch builds up to a thickness of more than 1/2 inch, it restricts water penetration, and minimizes the movement of air and fertilizers into the soil. It weakens the turf, which makes it more susceptible to insect, disease and weed invasion. Older lawns that have been highly maintained with excessive nitrogen applications and over-watered may be unhealthy because of a thatch problem. You can easily check this by cutting a plug of grass and soil several inches deep and examining it. A dense layer of spongy vegetation and organic (peat-like) material between the crown of the grass plants and the soil of more than 1/2 inch will indicate that your lawn needs to be dethatched.

Relieve thatch problems by aerating. This is done with a core aerator, which punches small holes to a depth of several inches, pulls out cores and leaves them on the surface. Leave the cores on the surface to dry, then crumble and spread them with a hand rake or by dragging a section of weighted chain link fence across the aerated area.

If it is set deeply, a vertical mower (power rake) may remove thatch but it will also damage the grass crowns (growing points). When the thatch layer is thick, most of the roots will be in the thatch. If that's the case, a vertical mower will pull out most of the live grass. Only a small amount of healthy turf will be left and you'll need to topdress and reseed the area. If a vertical mower is set shallow enough to leave the live grass undamaged, it does little more than remove dead grass clippings that will breakdown anyway.

## Shade

Lawn grasses need at least 4 hours of direct sunlight for healthy growth. If the lawn receives much traffic, it should get 6 hours of direct sun daily. Select the right species of grass to ensure you'll have a healthy lawn in shady areas. Creeping red fescue tolerates shade better than Kentucky bluegrass. Don't mow any shorter than 3 inches in the shady areas of your lawn. Fertilize and water shady areas less than the sunny part of your lawn. If you're having difficulty maintaining grass cover in areas where people walk, put in a stone or bark chip path to keep traffic off the grass. Often shade-tolerant ground covers are an excellent alternative to grass in shady areas that don't need to carry traffic.