

Homeowner Water Guide

Lawn Care

During spring and summer, your **water use can jump by 30 to 40 per cent because of outdoor watering activities**. Save money on your water bill while still having a healthy lawn by following these lawn care tips. Be sure to check out our Watering 101 Guide for more tips on watering your new or existing lawn.

Limit your lawn

Lawns are great for recreation areas, but they do require more water and generally more maintenance than other vegetation. Consider limiting your lawn space when planning a new yard, or replacing unused existing green space with YardSmart plants, shrubs or groundcovers. Be sure to check out the Homeowner Water Guide – Watering 101 and Homeowner Water Guide – Efficient Irrigation for more tips on watering your new or existing lawn.





Mowing your lawn

What + Why: Mowing is part of regular lawn maintenance, and part of being a good neighbor. Incorporating the following tips into your regular mowing practices can help keep your lawn healthy and resilient and reduce overall watering needs.

How:

- Keep your grass three inches long** – When you keep your lawn three inches high, a deeper root system will develop and more moisture will be retained. Longer grass also helps keep roots cool, increasing your lawn's chance of withstanding periods of drought and severe heat.
- Leave grass clippings on your lawn** – Grasscycling returns nutrients to the soil to increase organic matter, discourage weeds, and retain moisture. Grass clippings provide free fertilizer to help your lawn grow greener.
- Timing is important** – Don't mow your grass when it's wet or right in the middle of the day when the sun is hot.
- Follow a regular mowing schedule** – You want to remove no more than one-third of the grass length at each cutting, to avoid cutting the crown of your grass blades. Mowing your lawn frequently will help keep your grass healthy.

Did you know?

Under The City of Calgary's Community Standards Bylaw 5M2004, private property owners must ensure that grasses do not exceed 15 cm (6 inches) in height. Maintaining a healthy, beautiful landscape is what being a good neighbour and part of a community is all about.

Helpful tips: Make sure that the blades on your lawnmower remain sharp. This will help ensure clean cuts, which promotes better grass health. Lawns that are cut too short, especially during the heat of the summer, are more likely to be stressed and susceptible to disease.



Aerating your lawn

What + Why: Your lawn needs to breathe, and aeration can help. Lawn aeration involves the removal of small soil plugs or cores out of the lawn. Most aeration is done mechanically with an aeration machine. As lawns age or sustain heavy use, the soil can be compacted. **Grass roots require oxygen to grow and absorb**

nutrients and water, and compaction reduces the total amount of air within the soil. Aeration can benefit your lawn by:

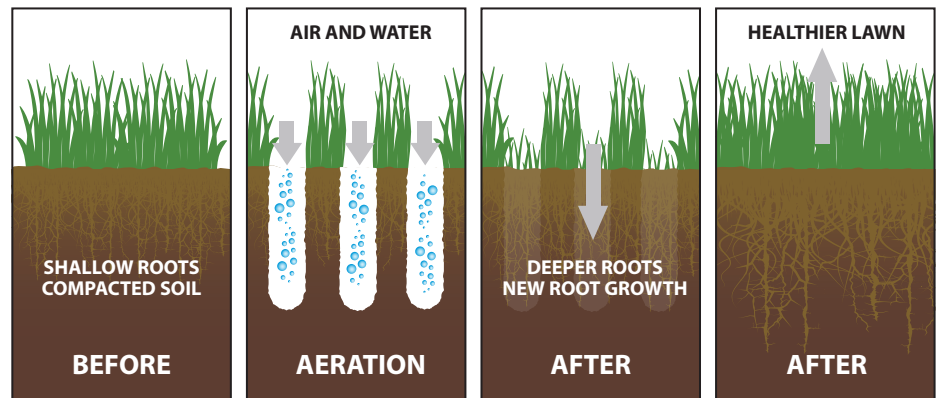
- Increasing the activity of soil microorganisms that decompose thatch.
- Allows for deeper rooting of lawn to increase resiliency.
- Improving rooting.
- Helps prevent fertilizer and pesticide runoff from overly compacted areas.

Aeration is often followed by overseeding or fertilizing — spreading grass seed or fertilizer over the lawn, which falls into the newly created holes (see Fertilizing and Seeding sections in this guide).

How: Aerators can be rented from many garden or rental centres, and some landscape companies will perform the service for you. Be sure that the machine has hollow tines or spoons to bring the soil core to the surface. In Alberta, the best time to aerate is in May to June and again in mid-September. Soil cores are best left on the lawn so they can eventually work back in.

When aerating:

- Aerating is not recommended for soils that have stones, rocks or tree roots just below the surface. It is also very difficult to aerate heavy clay soils.
- The soil should be moist but not wet. Lawns should be thoroughly watered two days prior to aerating, so tines can penetrate deeper into the soil and soil cores easily fall out of the tines.
- If aerating after prolonged rainfall, it is important to wait until the soil has dried somewhat so soil cores do not stick in the hollow tines
- Aerate the lawn in at least two directions to ensure good coverage.
- Be careful on slopes, near buildings, tree trunks and landscape beds.



Helpful tip: If in doubt about aeration, take a core sample of your lawn at least 6 inches deep. If grass roots extend only into the first 1-2 inches, your soil may be compacted and could benefit from aeration. Expect a seasonal effect with cool-season grass roots being shortest in late summer and at their greatest depth in late-spring.





Dormant vs dead grass – How do I know?

A brown lawn does not always mean that your lawn is dead – it could just be dormant. When grass goes dormant for the cold winter months, it shuts down and turns brown in order to conserve water and nutrients. Grass can also go dormant in the summer if your lawn is stressed from extreme heat or lack of water. Lawn dormancy is usually temporary and recovery will naturally take place as the stressful conditions lessen.

It's important to select **cool-season or drought tolerant grass species** – these species will naturally go dormant during prolonged heat periods and will recover and become green again when the correct temperature returns.

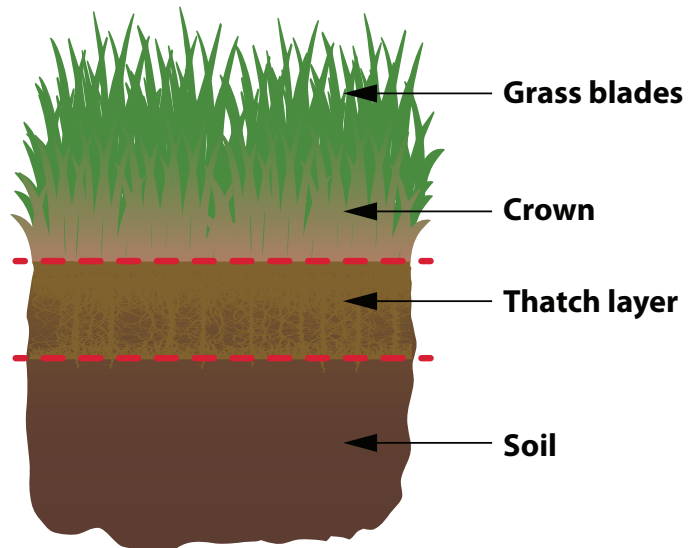
If you can pull your grass out with little to no resistance, or the brown colour is not uniform on your lawn (i.e. there are distinct patches of brown), then your grass may be dead.

Dethatching

What + Why: Thatch is the layer of dead stems and roots that forms above the surface of the soil. Thatch can be beneficial or detrimental to your lawn, depending on how much is present. A thin layer of thatch in lawn, half an inch or less, can provide insulation against temperature extremes and changing soil moisture. A thick thatch layer, one inch or more, can impact your lawn's ability to absorb nutrients. Wet thatch can hold excess water, preventing oxygen from getting into the soil.

How: The best time for thatching is just as your lawn greens up. Don't dethatch a young lawn or a lawn that is wet. There are two main ways to dethatch your lawn:

1. Manually with a leaf rake, garden rake or thatching rake.
 2. With a power dethatcher or a power rake. Both are performed with the same machine – the difference is the depth at which the cutting knives are set. When power raking, the dethatching machine is set high so that the blades just skim the surface. To dethatch, the machine is set low so that the blades reach into the surface of the soil.
- Power dethatchers can be rented or you can hire a landscape professional to do it for you. Note that they can be very heavy and will usually require more than one person to transport.
 - Before dethatching, mow your lawn to about half of its normal mowing height.



- Set the blade depth and spacing on your dethatcher. Typically the depth of blades are set to cut up to half an inch into the soil to remove the thatch and stir the surface of the soil. For spacing, tougher and cool season grasses typically require around one to two inches.

- Make a few passes over the area you are dethatching with crossing patterns for better coverage.

- Once finished, be sure to remove all thatch and debris from your lawn. You can place this material in your Green Cart.

- After your lawn is dethatched it is usually a great time to fertilize or reseed your lawn. If you reseed, follow-up by raking the seeds into the soil, add fertilizer and apply a light covering of organic matter such as compost.

- It's a good idea to give your lawn extra watering in the days after dethatching, especially during times of high heat and droughts.



Helpful tip: If you have an automatic irrigation system, be sure to mark the heads with a flag or stick so you can avoid damaging them.

Fertilizing

What + Why: Fertilizing your lawn provides important nutrients that aid healthy growth. Established lawns generally don't need fertilizing but if you're going to fertilize, follow these tips.

How:

- When considering fertilizers, choose a slow-release variety. This will feed your plants slowly over time instead of the short burst of nutrition that quick release fertilizers provide. Quality slow-release fertilizers will provide proper balanced nutrition over time to develop a healthier plant and root system that combats heat, cold, drought and other stresses.
- Early summer (after your lawn begins to actively grow) and fall are the best times to fertilize. Fall fertilization increases winter hardiness of the grass and provides nutrients, especially potassium, which makes turf stronger. The specific time of day you fertilize depends on weather conditions. Fertilizer should not be applied if rain is forecast within the next 24 hours. Be careful not to overwater your lawn after fertilizing – this can cause nutrients to leach off your lawn and down the stormdrain, and eventually into our rivers. Always read the directions on the bag carefully before applying any fertilizer.
- Organic lawn fertilizer, like compost, also provides vitamins and minerals that your lawn uses to stay lush and green. This specialized variety of fertilizer might include animal proteins derived from processed animal products or waste, potash, seaweed, manure, compost and corn gluten meal.

Helpful tip: The percentage of nitrogen is always the first of three numbers on the fertilizer bag. For example, a 34-6-6 fertilizer contains 34 per cent nitrogen per bag weight. But this number alone does not tell much about what kind of nitrogen is actually in the product. 23-3-3- is the correct ratio of nitrogen-phosphorus-potassium for a slow-release fertilizer.





- Organic lawn fertilizer applied two to three times per year can take the place of many artificial treatments depending on the nutrient requirements of your lawn. It is important to remember that fertilizing is only one component of sound maintenance practices for a healthier lawn.
- Apply about a quarter of a pound of nitrogen when fertilizing with a cart or hand spreader. It also helps to provide a small amount of nitrogen during the year; grasscycling (leaving grass clippings on the lawn) is the perfect way to do this.

Seeding an existing lawn

What + Why: Overseeding may be necessary to increase the density of your lawn. A dense lawn has fewer weeds and is healthier. Pests, extreme weather conditions and neglected management can also damage lawns, even when the soil is in good condition. If your lawn is a little thin, proper mowing, fertilizing and water practices may be all it needs. However, if that doesn't help, overseeding with a quality lawn seed may be the answer.

How: Choosing your seed – Choose a grass seed high in Fescue content (at least 60 per cent) and low in Kentucky Blue content (20 per cent at the most), remembering to use cool season varieties. Select a seed mixture that is not only high in physical seed attributes, such as purity and germination, but also contains the best composition of grass species for the use intended. Over the long term, blends produce a more durable lawn.

- Before you spread the seed over the thin areas, make sure there will be good soil-to-seed contact, and rake away any dead grass or debris. Dethatchers, aerators or vertical mowers can also be used to prepare the lawn prior to overseeding.
- Time your overseeding with a day before rain. Don't do before a hot weather forecast. The seed will need water to germinate.
- Apply 900 grams (2 pounds) per 1,000 square feet or more if the lawn is thin (up to 1.8 kilograms or three to four pounds). Refer to the Watering 101 Guide for more information on watering your newly seeded lawn.

Helpful tip: Soil fertility, moisture availability, sunlight levels and traffic affect the type of blend that will provide the best results for your yard. Look to sow your lawn with a blend of grass seed varieties. Check local nurseries and garden centres in Calgary for drought tolerant blends of lawn seed.

Choosing your sod grass type

Sodding your lawn can be a quicker alternative to starting a lawn from seed. However, it is important to choose the grass seed mixture carefully and according to the care and use your lawn will receive.

Look for native, drought-tolerant sod, such as a sod high in fescues. These will require less irrigation and maintenance, will thrive under varying soil conditions and will be heartier to Calgary's climate.

Kentucky Bluegrass mixtures, while hearty to disease and quick to green, will require much more irrigation and maintenance than native, drought tolerant sod species. Check your local nursery for sod types.



Healthy soil = Healthy lawn

Your lawn is only as healthy as the soil beneath it. Soil testing measures the available plant nutrients in soil, how acidic the soil is and its organic matter content. You should test your soil because fertilizer and lime recommendations can be made for your lawn based on that information.

Soil testing involves two steps.

1. Collect a soil sample from your lawn.
2. Send it to a laboratory for analysis.

Since front and back yards are often treated differently, you should take separate samples from each area. Do not mix soil from lawns with soil from vegetable and flower gardens.

Calgary soils tend to be more clay-based and alkaline, and can generally be amended with compost to improve quality. Check calgary.ca for dates and locations of FREE compost pickup.



Winterizing your lawn

Actions that you take in the fall will set you up to have a healthy lawn in the spring.

- Starting at the end of August, leave your grass longer. This will help your grass tolerate winter better.
- Let your grass grow into dormancy. Stop watering your lawn once the day length begins to shorten and nights begin to cool off.
- Before the temperature drops, be sure to drain your hoses, empty your rain barrel and store them away to prevent cracking and freezing.

Starting a yard from scratch

Starting your yard from scratch can seem like a daunting task. Taking the time to properly plan your yard will help you to create a tangible plan of action. Following these simple steps will set you up for gardening success in Calgary.

1. **Make a plan for your yard.** Use the YardSmart Planning + Design booklet, and follow the ten planning and design steps. Some key considerations include:
 - Getting to know your yard – Take note of where the sunny and shady areas are and where water drains and pools.
 - Prioritizing your landscape needs and wants – Define your objectives and identify who the users will be. Do you need lawn space for pets and kids; do you want your yard to be low maintenance; do you want to grow vegetables; do you want an outdoor sitting space?
 - Creating a design and selecting plants – Group plants with the same water needs together in areas of the garden that suit their needs. Opt for either native plants or plants that have proven the test of time to be low water-users that thrive in Calgary's climate. Consult the YardSmart materials for recommended hardy, water-friendly trees and shrubs, and annuals and perennials.



2. **Consider timelines.** If you're creating a lawn from seed or adding new sod, you will need to factor in germination and establishment timelines. Don't forget – you don't have to do everything at once. Set realistic goals that you can achieve each season. The best time to start your new projects is in the spring.

3. **Improve your soil.** A base of **at least eight inches of good-quality soil** is recommended for a healthy garden or lawn. An online top soil calculator is available at calgary.ca to determine how much soil you need for a project. Heavy-clay soils drain slowly while sandy or stony soils drain too quickly. Add compost to improve the absorption and water-holding capacity and drainage of your soil.

4. **Start a lawn from scratch.** Level your ground properly and ensure you have at least six inches of good compost. You can choose to start your lawn with new seeds or new sod. New seeds will take up to three weeks to germinate whereas new sod will be much quicker. Be sure you're selecting the correct seed blend or sod type (see the "Seeding an existing lawn" section for seed types). It's important that you maintain a consistent watering schedule until established. Refer to the Watering 101 Guide for more information about watering your newly established lawn.

5. **Use mulch.** Bark, wood chips and stone help reduce evaporation from the soil, inhibit weed growth and minimize loss of soil, which helps provide extra water to your plants.

6. **Dispose of diseased weeds, trees and shrubs.** If overhauling your yard involves the removal of diseased trees and shrubs, or noxious or invasive weeds, remember to check out What Goes Where on calgary.ca for information on their proper disposal.

7. **When it doubt, ask for help.** Feel free to look on calgary.ca or contact 311 and we'll help you find answers. Also, consider consulting a gardening book or talk to your local garden-centre expert for how-to info.



Helpful tip: The City of Calgary offers free mulch and compost pick up dates. Check calgary.ca for dates and locations.

