

SEASONAL LAWN MAINTENANCE

Tips and information for homeowners on lawn care practices, soil health, and common pests.





At this time of year your lawn is likely still dormant or just coming back into a state of active growth.

Lawn Mower Maintenance

Sharpen your lawn mower blades before the first cut of the season. Dull mower blades can leave grass more susceptible to rust, pest damage, and disease. Keep them sharp all season.

Dethatch

Thatch is an accumulation of partially decomposed plant material that can hinder lawn growth. Some thatch is normal, but a build up of over 1" is too much and can harbour insects and disease. Gently rake (using a rake or de-thatching tool) areas with excessive thatch build up to allow for better circulation of air, moisture, and nutrients.

Aerate

Aerating your lawn in the spring is a great way to improve soil quality and lawn health. Aeration alleviates compacted soil and allows water to penetrate deeper, producing a stronger root system. You can buy or rent aerators to do this yourself, or hire a lawn care company to provide the service.

Topdress & Overseed

Topdress your lawn with high quality organic matter and overseed with a grass seed mix made for Atlantic climates that contains a blend of perennial rye grass, tall fescue, and Kentucky bluegrass. This boosts growth and improves the density of your lawn.

At this time of year the lawn is in a state of active growth & is bright green if receiving enough rainfall.

Fertilize

After the first burst of grass growth apply 1/4 " of compost, or high quality organic fertilizer. If you opt for a synthetic fertilizer always ensure the nitrogen it contains is slow-release. Overfertilizing the lawn, especially with too much nitrogen, produces soft, weak plants that are more prone to pest and disease damage.

Soil Check-up

Soil health is the single most important factor in maintaining a healthy lawn. Spring is a good time to get your soil tested as this will help determine what it needs to optimize lawn health.

Mow High

The importance of mowing your grass high cannot be overstated. Mowing your grass to a height of 2.5-3" promotes growth and resilience. When grass is maintained at this height it is able to develop a deep root system, creating a dense lawn that is less prone to pests and is drought tolerant, therefore better able to compete with weeds.

When You Mow

Avoid mowing or working on the lawn when it is wet. This can cause the clippings to clump and lead to disease and pest havens. When you mow, leave the clippings on the lawn for added nutrients.





As temperatures increase and rainfall decreases, lawns will rest and lose their green colour.

Mow High and Only As Needed

Cutting your grass short and/or too often leads to a dry, weak lawn that is vulnerable to pest infestation. Always mow your grass to a height of 2.5-3" to promote growth and resilience.

Leave It Alone

During extended hot/dry periods grass can go dormant and should not be cut or fertilized. Both mowing and fertilizing should only be done when grass is actively growing. When grass goes dormant it can turn brown - but healthy lawns will survive this and enter back into their green state when moisture returns.

Watering

Watering deeply, but not too often, helps to promote an extensive root system. Lawns should be watered with 1" of water once or twice a week as needed (during dry periods). The early morning is the best time to water (between 6am-8am). Watering during the day leads to most of the water

being wasted through evaporation and watering in the evening can lead to mildew and other problems with grass. Be mindful of City water restrictions and consider harvesting rainwater to water your lawn to conserve water.



As temperatures cool and fall rains begin, grass will regain its green colour. It is time to assess any damage and prepare your lawn for the winter months.

Diagnose and Dose

Monitor for insect damage when the lawn greens up from fall rain - damaged areas will remain brown. You can give these spots a little extra attention by topdressing with high quality organic compost and then re-seed.

Natural Boost

Mulch up the fallen leaves with the lawn mower and leave them on the lawn. As the organic matter breaks down it is providing nutrients for the soil. If you have a thick layer of leaves you may want to do some fall clean-up to remove the bulk of he leaves and just mulch the remainder.

Aerate

Aerate and topdress with finely screened compost and sand for proper drainage and root development.

Overseed

Overseed bare patches with a grass mix well suited to Atlantic climates that contains a mix of perennial rye-grass, tall fescue, and Kentucky blue grass. Early to mid September is the best time, when temperatures are typically still warm, to promote germination.



Healthy & Green

Lawns that are diverse are more resilient to pests, drought, and other common lawn stresses. Some plant species, often considered weeds, can offer a range of benefits to your lawn, soil, and the ecosystem. Best of all, they often stay green, even in periods of drought.

WHITE CLOVER

White clover is a soft, dense, low growing turf alternative that is extremely low maintenance and beneficial. Turf pests, such as chinch bug, do not feed on clover at all, and it attracts beneficial insects and pollinators such as bees. Clover plants absorb nitrogen from the air and transfer it to the soil, acting as a natural fertilizer for your lawn. Allow existing clover in your lawn to grow and add clover seed to your lawn, especially in problem areas where it is difficult to maintain healthy grass.

Removing weeds from your lawn can be costly and labor intensive. Weeds can be beneficial, providing natural defense against common lawn issues. A truly green lawn is a diverse lawn.

SOIL HEALTH

A healthy soil base is the single most important factor in maintaining a healthy lawn.

The soil that your lawn grows in is home to many small rodents, insects, spiders, mites, worms, and microorganisms. Most of these organisms are extremely beneficial to your lawn - breaking down organic material to provide nutrients and allowing air and water to move through the layers.

Factors such as soil type, pH, compaction, and the amount of organic matter influence the health of your lawn. Topsoil typically contains the most organic material, and having an adequate amount of healthy topsoil is the best way to ensure a healthy lawn from the get go.

Getting your soil analysed is a good way to determine what amendments may be required to ensure optimal soil health. For example, if you determine your soil's pH you will know if your soil is acidic and may need additional lime to balance out the pH.

Healthy Soil Dos and Don'ts:

- Avoid excessive watering which can reduce the soil's oxygen supply.
- Avoid over fertilizing as it disrupts the nutrient balance and may decrease organisms in the soil.
- Protect the beneficial organisms that keep your soil healthy by avoiding the use of pesticides - which often kill beneficial insects and microorganisms as well as the target pests.
- Improve topsoil by topdressing your lawn once or twice a year with 1/4" of finely screened topsoil or compost.





DEALING WITH PESTS



Prevention is the best approach to deal with pests. If you maintain your lawn with practices that promote drought tolerance, dense growth, and deep-root development it will be much less susceptible to a pest infestation.

Unhealthy soil (low pH, compacted, low organic matter) is literally at the root of most pest problems. A healthy lawn should be able to tolerate the presence of some pests without them taking over your lawn.

Check the lawn regularly

Regular inspection of the lawn makes it possible to detect pests and other problems early.

Identify pests correctly

Most organisms that live in your lawn are beneficial and are not a cause of concern.

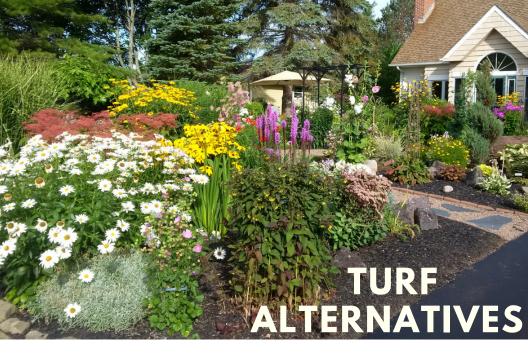
Innocent until proven guilty

Plant damage may not be caused by pests. Plants can be damaged by poor growing conditions, maintenance practices, or extenuating factors such as dog urine and road salt.

The root cause

A recurring pest infestation is indicative of a deeper issue.

Quick fixes like chemical pesticides are sometimes
warranted but can diminish the health and resilience of your
lawn in the long run, by killing beneficial insects and
microbial life in the soil that contributes to a healthy lawn.



Alternatives to turf range from low growing steppables, to edibles, to trees, shrubs, flowers and other perennials.

An attractive, no mow solution to reduce turf maintenance and pest issues.

BENEFITS:

- ENHANCES SOIL BY FIXING NITROGEN
- LOW MAINTENANCE
- NO FERTILIZERS OR PESTICIDES
- NO MOWING = LESS POLLUTION
- IMPROVES PROPERTY VALUE BY ADDING INTEREST TO YOUR LANDSCAPING
- REDUCES THE AMOUNT OF LAWN YOU HAVE TO MAINTAIN

TIP: Opt for edible and/or native pollinator species to increase the benefits of this type of landscaping.

Bee Friendly!





CHINCH BUGS

The hairy chinch bug is common in Eastern Canada. These small insects cause damage when they feed on the sap of the blade and stems of grass plants with their piercing, sucking mouth parts.

The areas that are affected first show up as irregular yellow patches. The grass may turn brown and die if the feeding continues unchecked.





Chinch bugs like poorly tended lawns with compacted soil, accumulations of thatch, and a lack of moisture. They thrive in lawns with an excess of nitrogen, often a result of over-fertilizing.

How to Avoid an Infestation:

- Mow high. Chinch bugs do not like shade and are less likely thrive in longer grass that shades the base of the grass, where they feed.
- Remove thick layers of thatch in the fall and spring
- Do not over-fertilize as this creates an ideal (nitrogen rich) environment for chinch bugs.
- Clover naturally fixes nitrogen from the soil and chinch bugs do not eat it - having some in your lawn is helpful in avoiding infestation and keeping your lawn green all season.
- Only fertilize when the grass is actively growing and be cautious of the amount of nitrogen contained in the fertilizer you use.
- When over-seeding or replanting grass, choose varieties that contain perennial rye-grasses that are naturally enriched with endophyte fungi which makes the grass less palatable for pests.

WHITE GRUB

White grubs are the larvae of common June bugs, European chafers, and Japanese beetles. They are 1/4" - 2" long and are curved like the letter C. White grubs live underground and feed on the roots of grass.

Damaged areas of turf can turn yellow or brown and lift off the ground surface easily, like a carpet. Animals, such as skunks, crows, and foxes eat grubs and will dig holes in the turf to reach them.



Adult beetles and chafers, the source of white grub infestations, prefer laying their eggs in short grass. Do not mow your lawn shorter than 2.5-3" to avoid a number of lawn issues.

How to Avoid an Infestation:

- Aerating your lawn will kill some of the grubs, and reduce compaction.
- Limit outdoor lighting during the beetle egg laying period (June, July) since light attracts these insects.
- Mow high and only when necessary as beetles prefer to lay their eggs in short grass.
- Hand pick or vacuum (with commercial vacuum) adult beetles. For best results, collect in early morning.

COSMETIC PESTICIDE BYLAW



The City of Charlottetown's Cosmetic Pesticide Bylaw restricts the application of non-domestic* pesticides for the control of weeds and lawn pests.

Why the bylaw?

There is a growing body of evidence that implicates pesticide exposure to the increased occurrence of several types of cancers and other serious health conditions. As many other municipalities across Canada have done, Charlottetown has chosen to restrict the use of cosmetic pesticides that may threaten the health of the environment and its inhabitants, as a precautionary measure.

^{*}Non-domestic pesticides are those which must be applied by a commercial applicator.



Pets are especially vulnerable to the health risks associated with pesticides because of their physiology and behaviour patterns.



Our animal friends sniff, roll, and play in the grass and then groom themselves by licking their paws and fur. If pesticides are present on the lawn then they are being exposed by ingestion, and through the skin and nose.

ADDITIONAL NOTES

Soil Analysis

As mentioned previously in this document, getting your soil tested is a great way to determine what is needed to optimize the health of your lawn and gardens. For a soil test you must collect 2 cups of soil from your property (exclude all rocks and debris) and take it to the P.E.I. Analytical Lab:

BioCommons Park 23 Innovation Way Charlottetown, PE C1E 0B7 23

The fee for the basic soil test is \$12 plus taxes.

How High?

The importance of not mowing your grass too short is stated numerous times in this document. A good way to measure the correct mowing height is to use the 1/3 rule. The 1/3 rule is that you only ever mow 1/3 of the growth off the blade, ideally leaving grass about 2.5-3" long.

Use extra caution on slopes which can be cut shorter than flat areas and which tend to be dryer anyway.

Problems & Pests

In this document, when we refer to pests we mean common insect pests that can cause severe structural damage to your lawn such as: chinch bug, and white grub.

When we say lawn problems we may be referring to pest infestations, lawn diseases, or other common lawn issues.

ACKNOWLEDGEMENTS & ADDITIONAL RESOURCES

Information in this manual was derived from the following sources:

Health Canada (2008). Life of a Lawn - Fact Sheet. Ottawa, ON.

Health Canada (2008). Lawn Maintenance - Fact Sheet. Ottawa, ON.

Health Canada (2008). Common Lawn Problems - Fact Sheet. Ottawa, ON.

Carmichael, D (2017). Turf Pest Training. Charlottetown, PE.

Comox Valley Regional District (CMRD). Seasonal Pocket Guide Pesticide Alternatives. CMRD, BC.

Government of Nova Scotia (June, 2010) Growing Healthy Lawns - Fact Sheet. Nova Scotia.

City of Windsor (2009) Lawn Care Calendar. Windsor, ON.

Find more information on the City of Charlottetown's Cosmetic Pesticide Bylaw & additional resources by visiting our website:

www.charlottetown.ca





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