

Why make a change?

Your lawn can be a great place to hang out, but depending on how you care for it, your lawn can also be part of big environmental problems.

Pesticides may not be so great for you and your kids either. In a science journal review of 98 health studies related to the use of weed and bug killers, half the studies found an increased cancer risk. And safe disposal of pesticides costs you, the taxpayer, big bucks.

Lawn and garden watering make up more than 30 per cent of our summer water use. That's when supplies are lowest and the demand is highest.

Much of this water is wasted through over-watering—a practice which invites lawn disease. So use water wisely—and help out your lawn, the fish and the environment.

Reduce pesticide use at home or replace it with a natural pesticide. Rainwater can wash bug and weed killers from our lawns into neighbourhood streams. Eventually, they reach our major rivers and oceans. Scientists are worried about the effects of these chemicals on birds and fish. Rain can also wash fertilizers from lawns into local waters.

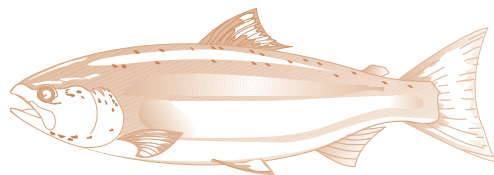
The fertilizers feed algae that choke out fish and other water dwellers.

Grass clippings can supply at least 25 per cent of your lawn's fertilizer needs.

It's called "grasscycling"—just leave the clippings on the lawn. This saves you time and money and the effort of bagging and bringing grass to the curb. And if you use less fertilizer, there's less chance of it washing off into our streams.

Natural lawn care works!

Fortunately, the natural lawn care practices outlined in this booklet make it easy to reduce the use of hazardous products while saving time, water and money, and helping to preserve our Lower Mainland environment.



Six Steps to Natural Lawn Care

1

Mow high, mow often and leave the clippings.

Healthy lawns grow on healthy soil.

Using proper soil preparation and lawn maintenance practices will help to build healthy soil and vigorous, deep-rooted lawns. These lawns are more resistant to disease, tolerate some insect and drought damage, and will out-compete many weeds. The practices recommended here can help make lawns healthier for our families, protect beneficial soil organisms and protect our environment too.

Set mowing heights up to 5 to 6 centimetres (2 to 2.5 inches) for most lawns to develop deeper roots and crowd out weeds.

Remove only one-third of the grass length at each mowing. Try to mow once a week in spring. Cutting too much at once stresses the grass.

Leave the clippings on the lawn.

“Grasscycling” provides free fertilizer (at least 1/4 of your lawn’s needs), helps lawns grow greener and denser, and doesn’t cause thatch buildup.

You can grasscycle with your existing mower. For best results, keep the blade sharp, mow when the grass is dry, and mow a little more often in the spring. Clippings left scattered on the surface will break down quickly. If there are clumps, mow again to break them up. Push mowers work great for grasscycling.

Mulch mowers

For clean mowing that leaves no visible clippings, consider buying a “mulch” mower. They chop clippings finely and blow them down into the lawn so they disappear and won’t be tracked into your house. Check the spring issues of Consumer Reports for current ratings of mulch mowers. The rechargeable electric mulch mowers are quiet, clean and grasscycle very well.

2 Fertilize moderately in September and May with a “natural organic” or “slow-release” fertilizer.

These fertilizers release nutrients to feed the lawn slowly, and less is wasted through leaching or runoff into our streams. Look for the words “natural organic” or “slow-release” on the bag.

Healthy lawns are a medium green colour, depending on the variety of grass. The darkest green turf, which many people strive for, is not in fact the healthiest turf. Overfertilized lawns are more prone to disease, thatch buildup and drought damage.

With slow-release or organic fertilizers, you can fertilize just twice a year, in mid-to late May and again in early September. If you choose to fertilize only once, the fall application is most important.

Test the soil first. Soils in the Lower Mainland are often acidic. Apply lime in the spring or fall if a soil test shows a calcium deficiency or acid soil conditions (pH less than five). Look in the B.C. Tel Yellow Pages™ under **Laboratories, Testing** for soil testing or try the simple kits available at your garden centre. Call the Compost Hotline: (604) 736-2250.

Remember,
grasscycling returns valuable nutrients to the soil every time you mow!

Fertilizer: How much is enough?

Local turfgrass experts recommend that home lawns receive 1.4 - 1.8 kg (3-4 lbs) of nitrogen in a balanced fertilizer per 93 square metres (1,000 sq. ft) of lawn each year.

Grasscycling can supply at least one-quarter of that. Split the rest between May and September applications. Avoid fertilizing in the early spring because it makes lawns grow too fast (unless your lawn needs help recovering from disease or insect damage). Wait until May.

3

Water thoroughly, but infrequently to encourage deeper roots.

Grasses do better when the whole root zone is wetted and then partially dries out between waterings. Avoid frequent shallow watering that leads to shallow rooting. Overwatering can promote lawn disease, leach nutrients from the soil and waste water.

Newly planted lawns will need daily watering if planted in the late spring or summer. Plant in September to avoid that chore, but be ready to water if it stops raining.

Aerate the lawn if water won't penetrate because of soil compaction. Dethatching will also help water penetrate if there is heavy thatch buildup.

Water about 2.5 centimetres per week, during July and August. Use less water in late spring or early fall—let the weather be your guide. Water slowly, or start and stop, so the water penetrates rather than puddling or running off. Sandy soils will need lighter, more frequent watering because they can't hold much water. Water early in the morning as it reduces water lost to evaporation.

Consider letting the lawn go brown and dormant in the summer.

Watering deeply but slowly, so it penetrates, once each rainless month will help support dormant lawns so they recover better in the fall. (Perennial ryegrass lawns on sandy soil will not survive if allowed to dry out completely.) Avoid heavy traffic on dormant lawns, or regularly water the play/high use areas to prevent damage. When rain returns in the fall, overseed any thin areas to thicken the lawn and help crowd out weeds.

Lawn Sprinkling **Regulations**

Effective June 1 - September 30

Sprinkling allowed:

4 - 9 a.m. & 7 - 10 p.m.

**Wednesday & Saturday:
EVEN numbered addresses**

**Thursday & Sunday
ODD numbered addresses**

GVRD Phone number:
(604) 437-GVRD

4 Improve lawns with aeration and overseeding, or consider fixing the soil and replanting.

Poor soil: *What to do?*

If your soil is very poor and compacted, it may be best to fix the soil and replant.

- If very weedy, remove the sod with a rented sod stripper or kill the lawn and weeds with a soil sterilizer.
- Get a soil test to find out what's missing and spread the amendments (like lime) recommended in the test results.
- Spread five centimetres of Type A compost and till it in to a depth of 15 to 20 centimetres. Sandy or gravelly soils may need other amendments too— consult a certified landscaper or call VanDusen at (604) 822-5858 for help with these soils.
- Rake the soil level, roll with a landscape roller, water to settle for a day and rake again.
- Seed with an appropriate grass mix and water daily if the weather is hot and dry, until the lawn is well established.

Aerate compacted soil in the spring or fall to improve root development. Check to see if your soil is compacted by digging a hole. If your soil is compacted more than 5 centimetres (2 inches), consider calling a landscape professional whose equipment can aerate much deeper. Otherwise, rent a power aerater and use it when the soil is moist. Make two or three passes on the lawn for best results. Rake or mow to break up excess cores.

Overseed, after raking or aerating, with a perennial ryegrass/fine fescue mix designed for Lower Mainland conditions. Talk to a knowledgeable nursery person or call VanDusen Botanical Garden (604) 822-5858 for information. A light application of “starter” fertilizer can help the seeds grow quickly and crowd out weeds. A 1 1/4 centimetres (1/2 inch) thatch layer can be beneficial, but much more than that can keep water, air and fertilizer from reaching the roots. Rent a power dethatcher and make several passes, then overseed to thicken the lawn and crowd out weeds.

April/May or September are the best times to aerate and overseed, or to amend the soil and replant a lawn.

Call VanDusen Garden (604) 822-5858 for more information, or consider hiring a qualified professional for this big job.

5

Think twice before using pesticides.

These products may damage soil and lawn health and pollute our waterways. Some studies also suggest that use of pesticides may harm our health.

Crowd out weeds and reduce pest damage by promoting a healthy, vigorous lawn through proper fertilization, irrigation and mowing. Improve thin areas with aeration and overseeding. A healthy turf will need far fewer pesticides.

Accept a few “weeds” in your lawn. Some, like clover, may look fine. Target the problem weeds, leave the others.

Remove problem weeds by hand in the spring and fall. Don't cover your entire lawn with pesticides just to kill a few dandelions. Pincer-type long handled

weed pullers are available at many garden stores. They work well in moist soil, with no stooping. Pull dandelions when they're young (for best results get as much root as possible).

Or spot-spray problem weeds with the proper herbicide at the right time of year. Identify the weed to make sure you are using the correct product.

Read the label carefully before using any pesticide. Be sure to follow all label warnings, wear proper protective clothing and keep children and pets off the lawn for at least as long as the label specifies. Call the B.C. Recycling Hotline at (604) 732-9253 for information on safe disposal of leftover pesticides.

What about crane fly?

European crane flies can be a problem on wet lawns. Crane fly larvae feed on grass roots and crowns in fall, warm winters and early spring. Many larvae are eaten by birds in fall and winter. This can bring populations below damaging levels. You cannot control crane flies by applying pesticides in the late spring or summer. Count larval populations in the early spring before choosing any control method. A healthy lawn can tolerate some crane fly damage. Overseed and fertilize in May to help fill in any damaged areas.

6 Consider alternatives to lawns for steep slopes, shady areas, or near streams and lakes.

Leave a buffer of natural vegetation along streams and lakes to filter pollutants and protect fish and wildlife. These buffers should include shrubs and trees to shade the stream, and ground covers of native plants or low-maintenance grasses that are left unmowed and wild. Avoid use of pesticides or soluble fertilizers near streams, ditches, wetlands, or shorelines.

Grass grows best on well-drained soil in full sun or partial shade. Steep slopes are hard to mow and water. Call VanDusen Botanical Garden at (604) 822-5858 for information on alternative plants or grasses that do well in shady, steep or wet sites.

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If you find you have too many grass clippings in the spring, consider adding them to your compost bin.

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Many municipalities have drop-off and/or curbside collection service for yard trimmings available to residents.

For more information, call the Compost Hotline (604) 736-2250.

Other resources:

Call (604) 436-6795 for the GVRD fact sheet "Clean Air Gardening".

Call (604) 437-GVRD for a free "Waterwise Gardening" brochure.

Call (604) 436-6800 for a free "Here's the Dirt! A Guide to

Home Composting" and a listing of mulching mowers available regionally.