

A Calgarian's guide to a **healthy yard**

*Face it, there's no
such thing as perfect.*



Everyone, it seems, longs for the perfect garden.

Lush, green lawns. A profusion of flowers. Colorful trees and shrubs.
And not a weed or a pest in sight.

In fact, that kind of perfection is bought at a hefty price. The cost of a yard free of dandelions or a pathway free of ants is one that usually involves the use of pesticides — materials which are designed to kill specific pests — insecticides kill insects, herbicides kill plants, fungicides kill fungi, and so on. Not only are these materials expensive but when used improperly can take their toll on the environment and may affect human, pet and wildlife health.



The best approach to reduce pests and diseases in your garden is to ensure that your yard stays healthy. Start with a variety of plants and give them good growing conditions.

Use the **IDEAL Principles** and you will not only keep your garden problem-free, but save yourself time, money and energy.

This brochure is part of a municipal education program designed to share with Calgarians the importance of knowing your garden and plant needs, using pesticides only as a last resort. Don't try to wipe out every pest! Reduce them to an acceptable level.

dandelion



Follow these IDEAL Principles to ensure a healthy yard.

Inspect your yard regularly.

Once a week, take a close look at the condition of your soil, the health of your plants and grass, and the types of creatures that make your back yard their home. Identifying potential pests promptly is important because they can take over new territory quickly and you have a better chance to control them when they are localized.

Making sure your soil is in good condition is one of the most important ways to ensure healthy vegetation. A soil that has adequate organic matter (through addition of compost or other organic matter), air and water will provide good conditions for healthier, pest and disease-resistant plants.

Determine what needs to be done.

If your plants don't look healthy, try to diagnose the problem. Consider whether your own gardening practices have contributed to the situation. Poor turf health encourages weeds, insects and diseases. The solution may be to change the way you maintain your property. Remember, a reasonable population of aphids may appear numerous but might not affect your plants' health if left undisturbed.

stinkweed





thistle root

Evaluate your methods of response.

The choice of controls depends on the problem. There are, however, some effective alternatives to pesticides.

Hand Pick Problem Pests

Hand-pick large insects and drop them into a bucket of soapy water. Removing diseased leaves and branches can help to slow the spread of diseases. Diseased leaves must be disposed of to prevent spread of disease.

Water Control

A jet spray of water can knock insect populations off your hardier plants. For annuals and more delicate plants, hand-pick pests.

Use Simple Barriers

Barriers don't kill pests. They simply keep pests away from places you don't want them. These are some common types of barriers and deterrents:

- Floating Row
- Netting
- Copper Slug Barriers
- Sticky Barriers
- Traps

Encourage Biological Control

Some of your garden's best friends are the 'beneficials' — predators that survive by eating insects, slugs, mites and other creatures in your landscape. Many of these 'good guys' have quite specialized tastes, but others will eat just about anything that is smaller and slower. In all cases, beneficials will be attracted to your garden if you provide water, food and a place to live. Some of the beneficials include:

- Ladybugs
- Lacewings
- Birds
- Spiders
- Earthworms
- Bees and other pollinators

lacewing



foxtail barley



Employ the Least-Toxic Chemical Controls

Although using these suggested practices will reduce, and possibly eliminate the need for pesticides, there may be times when these controls are appropriate.

If you choose to use a pesticide, make sure you apply it with care, read the label very carefully and choose the correct one — ask for help at your garden centre.

Combination "weed and feed" — type products (fertilizer with herbicide) are not recommended as they are non selective and incompatible with proper plant healthcare. Use herbicides responsibly by applying only to the exact location of the problem (spot treatment).

Act responsibly.

Maintain a healthy yard that encourages a variety of species and uses pest control alternatives. Your attention to detail will reduce your pesticide use while enhancing your yard's beauty.

Learn to live with nature.

Weeds and insects are part of nature and should be recognized as part of our ecological environment. A few weeds are acceptable and no response may be your best response.

As mentioned in the **IDEAL Principles**, a balanced ecological environment in your yard will lessen the chance of problems. The best place to start may be your lawn. Not only will a healthy lawn save you money; it is the best way to prevent incursions of insects and weeds.

Ten tips for healthy lawns.



1. Begin with healthy soil. Soil in Calgary tends to have a lot of clay. To condition and enrich your soil with needed nutrients, add natural organic matter like compost on a regular basis.
2. Crowd out weeds. Choose the right grass. When shopping for grass seed, select suitable varieties such as Kentucky Bluegrass or fescues and spread them on your lawn every fall (over-seeding).
3. Mow high. To discourage weeds, keep your lawn mower blade sharp and at a height of five to seven centimetres. Never cut off more than one-third of the grass at a time.
4. Cycle your grass. Leave your clippings on the lawn to return nutrients to the soil. This will effectively reduce your need for fertilizer.
5. Top-dress and fertilize. Lawns should be fertilized in the spring and again in the fall. Use a slow-release granular fertilizer and apply a top layer of natural organic matter such as compost (top-dress).
6. Let your lawn breathe. Aerate your lawn by removing small plugs of earth to allow air and water to get to the roots.
7. Water the roots. Let your lawn soak up enough water once a week, early in the morning, to promote deep root growth. If it has rained, adjust your watering accordingly. Water only when the lawn begins to wilt from dryness. For example, when the color dulls and footprints stay compressed for more than a few seconds.
8. Remove thatch. Thatch is a thick compacted layer of dead plants and grass which attracts harmful insects. Too much thatch prevents water and nutrients from getting to the roots. Remove thatch by gently raking your lawn in late spring or early summer. To prevent thatch, don't over-water or apply too much fertilizer.
9. Develop a tolerance for a few dandelions, weeds and insects. Most insects are not harmful and some are important to our environment. If control is needed, dig out weeds and their roots by hand.
10. Consider alternative plants. Alternatives to grass include trees, shrubs, perennials, ground covers and wild flowers. Native species work best and can be found at local garden centers.



plantain



*For more detailed information
and tips contact
Integrated Pest Management.*

This brochure was designed and written by the members of the Pesticide Education and Best Practices Sub-Committee. Member representation includes The City of Calgary, The Sierra Club-Chinook Group, Calgary Regional Health Authority, Calgary Horticultural Society, LANTA (Landscape Alberta Nursery Trades Association), The University of Calgary, Southern Alberta Turf Grass Association, Calgary Board of Education and Alberta Environment.

Copies of this brochure are available
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