

# Healthy Lawns & Gardens *Naturally*

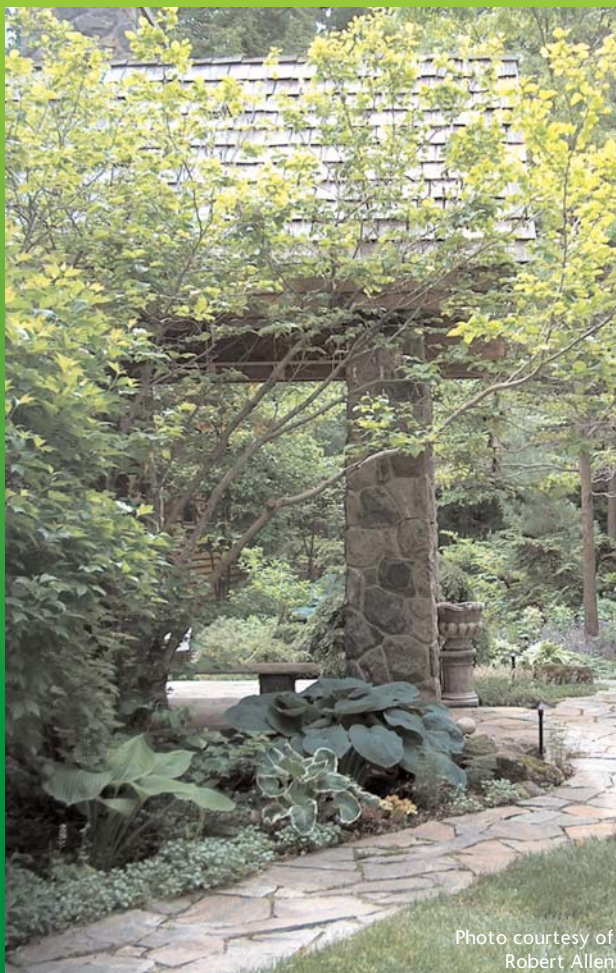


Photo courtesy of  
Robert Allen

BEST PRACTICES SERIES

The use of fertilizers and pesticides can be reduced or eliminated by using natural lawn and garden care practices.

## *Pests are symptoms of an unhealthy lawn.*

A naturally healthy property with living soil is your best defense against pests.

### Work with nature through **Plant Health Care & Integrated Pest Management**

The **Plant Health Care** (PHC) approach focuses primarily on preventative measures - those that encourage plant vigor and maintain healthy, balanced growth. Plant vitality is the best protection against pest problems. The basic components of PHC are: PLANT SELECTION, PLANTING & MAINTENANCE.

**Integrated Pest Management** (IPM) puts the emphasis on PREVENTION, looks at all available information and considers all the management options before deciding on the most effective, economical and environmental means of managing a pest problem.

#### **IPM is based on the following principles:**

- ◆ PREVENTION is the best approach for managing pests through Plant Health Care principles.
- ◆ CHECK the lawn regularly.
- ◆ Make sure pest problems are correctly IDENTIFIED.
- ◆ Once you've identified a pest in your lawn, check for damage and decide whether ACTION is necessary.
- ◆ Recurring pest problems are often a sign that lawn care practices need to CHANGE.
- ◆ If action is necessary, MECHANICAL and BIOLOGICAL control methods should be used. Pesticides should be applied ONLY as a last resort and must be carefully chosen, carefully used, carefully stored and carefully disposed of.

## The SOIL solution

Healthy soil is the basis for a healthy lawn and garden. Soil can include clay, silt, sand, air, water and organic matter.

The microscopic organisms in healthy soil are important because they break down organic matter, which releases nutrients into the soil for plants to feed on. Ideally, 5% of your soil should be organic matter.

You can easily boost the organic content of your soil.

- ◆ GRASSCYCLE - Leave your grass clippings on the lawn to return nutrients to the soil and reduce your need for fertilizer by up to 30%.
- ◆ MULCH leaves in the fall with your lawn mower. Waterfront property owners should compost their leaves while others can leave them on their lawn.
- ◆ TOP-DRESS each autumn with a 4:1 mixture of soil and compost at a rate of 3/4 cubic yards per 1000 square feet.

These organic amendments add nutrients, increase the level of beneficial microorganisms, help retain water and reduce materials entering landfills.

## LAWN ALTERNATIVES

Create a more balanced ecosystem on your property by incorporating a variety of plants and grasses. Make note of the soil and sun preferences for each plant and match them to the conditions on your property for best plant growth.

NATIVE plants work best because they are adapted to the local environment, require less fertilizer and water, and are less susceptible to disease and pests. Native species also provide food and habitat for birds and butterflies and require little care once established.

- ◆ Replace your existing lawn with groundcovers such as Wintergreen, Foamflower, Barren strawberry, or clover.
- ◆ Use paving stones or inorganic mulch in high traffic areas instead of grass.
- ◆ Allow a buffer strip of trees, shrubs, groundcovers, and wild grasses to grow along waterways to filter out pollutants.

# Steps to a NATURALLY HEALTHY lawn & garden

Follow these simple tips to prevent and manage lawn and garden pests naturally!

## MOW HIGH

Mow as high as possible, but within the recommended height for your lawn species (usually about 3"). Taller grass will crowd out weeds, grow longer roots and shade the soil. Sharpen your mower blades after every 8 hours of use and never remove more than a third of the leaf blade at each mowing.



## WATER DEEPLY

Irrigate your lawn infrequently so your soil is moistened to a depth of about 4-6". Water your lawn between midnight and 9 a.m. to minimize the time your lawn sits wet. Use a soaker hose for garden beds to conserve water and minimize moulds and diseases on leaves. Shaded lawns require more water because trees and shrubs consume large quantities of water.



## OVERSEED

Thin turf or lawns with bare patches should be aerated, organic nutrients added, lightly cultivated, top-dressed with a soil-compost mixture and overseeded with a mixture containing fescues and endophyte enhanced perennial ryegrass. Select a seed mixture according to the area to be seeded - sun, shade, sandy soil, etc. Best results are seen when seeding is done late August through mid-September, however seeding at other times can be successful provided that the seed is kept moist.



## FERTILIZE

If a soil analysis shows the need, give your plants regular, small feedings of fertilizer during their growth period. Natural organic matter such as compost, kelp, bone or blood meal will release nutrients on a continuous basis equal to the plant's requirements. Benefits of using these organic fertilizers include fewer applications, improved moisture and nutrient retention, improved aeration and resistance to soil compaction.



## CONTROL WEEDS

Dig out weeds and their roots by hand when the soil is moist and drop some native plant seeds in the hole to discourage weeds from returning. Pour boiling water on weeds that are growing between patio stones. Learn to tolerate some weeds in your yard.

## AERATE

Aeration is used to improve water infiltration in compacted soil. Aerate twice yearly in May and October and top-dress with a soil-compost mixture until conditions improve. Aerate yearly thereafter in October followed by top-dressing. Chemical-free lawns will contain nature's aerators - earthworms!



Thatch is a layer of partially decomposed plant parts that forms a brown mat between the soil and the grass. Thatch rarely becomes a problem on home lawns, but if the thatch layer becomes greater than 1" thick, it should be reduced through core aeration and top-dressing.

# NATURE'S HELPERS

## *Not all bugs are bad!*

Not all insects and creatures are bad for your garden; most are BENEFICIAL and function as nature's own method of pest control. ENCOURAGE the presence of the following creatures in your garden:

Friends	How they help
Bats & spiders	Eat insects
Bees & wasps	Pollinate plants
Earthworms	Feed on organic matter to release nutrients, aerate the soil
Ladybugs & lace wings	Eat aphids
Dragonflies	Eat insects, especially flies
Toads, frogs & snakes	Eat slugs, earwigs, cutworms, aphids, flies

Attract beneficial insects to your garden by planting flowers in the composite family (i.e. coneflowers and Black-eyed susans), mints, and plants in the umbel family (i.e. dill and yarrow).

Attract toads and frogs to your property by creating shelter in a cool, shady spot. Create a toad abode with an upside-down terra-cotta pot with an opening, or dense leafy foliage close to the ground in summer and piles of leaves in winter can provide cover.

Use natural alternatives to deal with pests instead of using pesticides because pesticides will not only kill the pest, but may also kill the beneficial bugs and creatures that help keep these pests in check.

# TRY THESE SAFE SOLUTIONS

## Dandelions

Enjoy compacted soil and thin turf cover. To treat, aerate your soil, hand pull the plant removing at least 80% of the root, cover bare spots with topsoil and overseed with a mixture including ryegrass.

## Chinch

Thrive in lawns that are under stress, usually from drought conditions. A properly irrigated and healthy lawn will keep populations in check and prevent them from becoming a pest. Aerate and overseed with clover .

## bugs

## White

Can be found in lawns under stress, usually from drought. A properly irrigated and healthy lawn will keep populations in check and prevent them from becoming a pest. Aerate and overseed with endophytic grasses and clover. Encourage natural predators like ravens and black-birds to keep populations down.

## grubs

## Spring

## dead spot

Appears as circular areas of dead grass 6-12" in diameter when growth begins in the spring. To treat, lightly rake the affected areas, top-dress with a soil-compost mixture, overseed with a mix that includes perennial ryegrass, and fertilize with an organic fertilizer.

## Localized

## dry spots

Occur when the breakdown of organic matter in the soil results in a substance that coats soil particles so they repel water. To treat, aerate and flood the affected areas with a solution of 1 tbs of dishsoap in 20 L of water.



# Where To Find More Information

- ♦ **Muskoka Watershed Council**  
[www.muskokaheritage.org/watershed](http://www.muskokaheritage.org/watershed)
- ♦ **Health Canada - Healthy Lawns**  
[www.healthylawns.net](http://www.healthylawns.net)
- ♦ **Go for Green - Gardening for Life**  
[www.goforgreen.ca/gardening](http://www.goforgreen.ca/gardening)
- ♦ **Composting Council of Canada**  
[www.compost.org](http://www.compost.org)
- ♦ **Guelph Turfgrass Institute**  
[www.uoguelph.ca/GTI/](http://www.uoguelph.ca/GTI/)
- ♦ **IPM Accreditation**  
[www.planthealthcare.ca](http://www.planthealthcare.ca)
- ♦ ***On the Living Edge***: Your Handbook for Waterfront Living published by the Living By Water Project. Available from the Muskoka Heritage Foundation at (705) 645-7393.
- ♦ ***Building a Healthy Lawn*** by Stuart Franklin. Published by Storey Books, 1988. 176 pages.
- ♦ ***Forest Plants of Central Ontario*** by B. Chambers, K. Legasy & C.V. Bentley. Published by Lone Pine Publishing, 1996.



*Muskoka*  
WATERSHED COUNCIL

9 Taylor Road, Box 482  
Bracebridge, ON P1L 1T8

Phone: (705) 645-7393 Fax: (705) 645-7888  
Email: [watershed@muskokaheritage.org](mailto:watershed@muskokaheritage.org)

Brought to you by: