

For the Love of the Earth

*Composting
and other Greening Tips
for the Upcoming Gardening Season*



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Information Sheet #1

How does your Garden Grow?...

START WITH THE SOIL

A healthy, flourishing garden begins with healthy soil.

*By learning as much as you can about your soil,
you will be better able to match plants to your conditions.*

- You can determine the type of soil you have by conducting a few simple tests. These tests will reveal your soil's composition (clay, loam or sand), pH (acidity or alkalinity), and drainage capacity.
- To assess your soil's composition, give it a squeeze (make sure it is moist, but not wet). Sandy soil don't retain much moisture – it will be crumbly and won't hold its shape in your hand. Clay soil will form a lump when you squeeze it – they get sticky when wet and turn very hard when dry. If your soil is a loam, the ideal garden soil, it will form a ball when you squeeze it, but will break apart easily.
- A more accurate way to determine whether your soil's composition is to put about two cups in a litre jar, fill it with water, shake well, and then leave it to settle for a day. Sand will quickly settle to the bottom, silt will gradually form the next layer, and clay particles will be the last to settle out on top (organic matter will float on the water's surface). Compare the height of each layer as a percentage of the total height of the soil in the jar to determine whether you've got loam (20% clay, 40% silt, 40% sand), clay (60% clay, 30% silt, 10% sand) or sand (5% clay, 10% silt, 85% sand).
- To test the pH levels in your garden (acidic, neutral or alkaline), try a home pH testing kit, available at most nurseries. These easy-to-use kits will help you determine what plants will do best in your soil.
- Finally, to determine the drainage capacity of your soil, dig a hole 1 foot square and about 1 foot in depth. Fill it with water, then let it drain overnight. The next day, fill it again and record how long it takes to drain, as follows. First, lay a stick across the top of the hole as a reference; then use a measuring tape to record the depth of the water at hourly intervals. An ideal drainage rate is 2 inches per hour, and anything between 1 and 3 will work for most plants. Less than 1 inch per hour is too slow, and more than 4 inches per hour is too quick.
- Whatever your soil type, pH, drainage and nutrient levels, you can upgrade your soil by adding compost. Compost improves drainage, increases water-holding capacity, builds fertility, and generally improves soil health. If you are building a soil from scratch (e.g., for raised beds), use one third compost, one third garden soil, and one third sharp sand. If your Garden soil is already sandy, use one third soil and two thirds compost. In already established gardens, add a 3 - inch layer of compost around your plants each year, in spring, summer or fall.

Information Sheet #2

How Does Your Garden Grow?...

TURN OFF THE TAP

Water is a resource too precious to waste. More and more cities are enacting watering bans or restrictions during the summer months when Environment Canada estimates that water use increases by 30 to 50 percent. By taking a few simple steps, you can ensure that your green garden conserves water and still looks beautiful.

- Enhance the water-retention capability of your garden's soil by top-dressing with compost in spring, summer or fall. Not only will this organic matter improve your soil's texture and water-retention capabilities, it will also add important nutrients.
- Mulch your plants, shrubs and trees with a 3-inch layer of compost, shredded bark, straw or chopped leaves during the growing season. Make sure the mulch doesn't touch the base of the plant. The mulch layer will conserve moisture in the soil and prevent weeds from sprouting.
- When planting young seedlings, create a saucer-like area around the base of the plant so rainwater will be directed to the plant's root zone.
- If you live in an area with regular dry periods during the summer months, plant drought-tolerant species that thrive with no watering. A local nursery can help you choose drought-tolerant plants, many of which are prolific bloomers – an attractive bonus.
- Place plants with similar moisture needs together in the garden. This way, instead of watering the whole garden indiscriminately, you can water only those plants that need it.
- Install a rain barrel, connected to your downspout, so you can collect rain for garden use.
- Consider planting native species (see Info Sheet #6) as these plants are adapted to the climate and rainfall patterns in your region.

*If you have a lawn, see Info Sheet #7 for smart lawn-watering tips.

Information Sheet #3

How Does Your Garden Grow?...

GO ORGANIC

For every problem that may arise in your garden, there's a green, organic solution. Instead of using synthetic chemicals, which may leach into and contaminate the soil and groundwater, use these time-tested, organic methods. And remember, the best organic practice is prevention: healthy soil and plants are more resistant to pests and diseases.

- Keep your soil healthy by adding lots of organic matter, in the form of compost, throughout the growing season. Compost contributes to the health of the soil by feeding and enhancing the soil food web -- the scientific term for the organisms in the soil and the relationship between them. A large and diverse soil food web supplies nutrients, build good soil structure, suppresses disease, and build soil organic matter.
- Keep your plants healthy by making sure they're not too crowded and that they're getting the proper amount of water (neither too much nor too little). Divide over-crowded plants and move surplus plants to another spot in your garden or give them to friends.
- Hand-pull or clip weeds when they first appear – before they go to seed. By dealing with weeds immediately, you'll save lots of time later.
- Inspect your plants regularly, and at the first sign of insect infestation, identify the creature in question to determine if it is harmful (Not all bugs are bad! Many are beneficial.).
- For a good all-purpose, organic spray to control harmful insects, mix 1 whole garlic bulb, a generous pinch of cayenne pepper and 1 litre of water in a blender. Mix thoroughly, let the solids settle, and then pour the liquid into a spray bottle. Spray on the leaves (tops and undersides) and stems of insect-infested plants. You can also use a commercially available organic insecticidal soap, such as Safer's.
- Birds eat bugs – see Info Sheet #4 for tips to attract birds to your garden.
- Remove diseased plants from the garden and clean your tools regularly.
- Consider companion planting in the vegetable garden to keep pests to a minimum. For example, plant marigolds around the tomato patch – the marigolds' strong smell repels insects.

Information Sheet #4

How Does Your Garden Grow?...

WELCOME WILDLIFE

The green garden is alive with creatures. Birds, butterflies and pollinating insects all bring life to the garden and pleasure to the gardener. Hang out the welcome mat by creating habitat that meets the needs of wild creatures.

- The best way to attract wildlife is to plant a diversity of species: trees, shrubs and perennials. These different layers in the garden will provide a variety of habitats for the specific needs of various creatures.
- Include a variety of flowers that bloom throughout the growing season – from spring to fall – ensuring a long-lasting food source for nectar-loving creatures such as butterflies.
- Leave seedpods on perennial plants over the winter to provide an important food source for birds.
- If you have the space, consider planting both deciduous and evergreen trees which will provide year-round habitat for birds.
- Consider shrubs that produce berries for birds. A local nursery will be able to suggest appropriate shrubs for your area.
- If you have a lawn, consider replacing at least a portion of it with either a flowerbed or a low-growing groundcover. Lawns provide little in the way of wildlife habitat.
- Consider adding a water feature to your garden. This is one of the best ways to create wildlife habitat. Your water feature can be as simple as a bowl of water left on the ground in an open area or, better yet, it can be a birdbath. A pond requires more work (both in planning and in maintenance) but has enormous wildlife benefits.
- To attract wildlife, it's important to garden organically. Synthetic chemicals kill butterflies and beneficial insects. See Info Sheet #3 for more information on organic gardening.
- Keep a list of the creatures that visit your green garden habitat and share the news of sightings with others in your neighbourhood. It may inspire them to create wildlife habitat too.

Information Sheet #5

How Does Your Garden Grow?...

BUILD BIODIVERSITY

Quite simply, biodiversity means the variety of life on earth. Think of it as a web: the more links and strands of connection there are, the stronger the whole web becomes. It's the same for the green garden: with a variety of plants and life forms, the garden as a whole is stronger, healthier and more resilient.

- Biodiversity begins below the ground – a healthy soil teeming with diverse microorganisms. The best thing you can do to contribute to the life of the soil is to add compost and lots of it. Compost is full of beneficial bacteria and other microorganisms that create a healthy, living soil.
- Monocultures, such as lawns or the same vegetable crop planted year after year in the same place, are an invitation to infestation! Rotate vegetable crops by planting them in different places within the garden bed each year. Add some clover to your lawn, or incorporate other types of ground cover, in order to enhance biodiversity.
- Plant a variety of different species throughout the flower garden, aiming, in particular, for a variety of blooming times, from spring through fall. This way, your biodiverse green garden will meet the needs of a variety of wild creatures – the plant biodiversity will encourage animal biodiversity, too.
- Avoid the use of synthetic chemicals in the garden, which destroy good bugs along with bad. See Info Sheet #3.
- Keep a list of all the diverse creatures that visit your green garden – you'll be amazed by the amount of life buzzing in your yard!

Information Sheet #6

How Does Your Garden Grow?...

GROW NATIVE

Native plants are species that existed in an area prior to European settlement. They've developed over millennia and are adapted to local conditions. The big advantage for the green gardener is that native plants tend to be lower maintenance, requiring little in the way of supplementary watering and no synthetic chemicals.

- Learn about the native plants that grow in your area as well as what type of habitat they prefer in the wild (for example, woodland, meadow, prairie, wetland). Contact local naturalist groups, gardening organizations and environmental groups to find out if they've compiled lists of native plants or if they can recommend local wild areas to explore.
- Visit a specialty native plant nursery to find out what native plants are commercially available in your area (never dig plants from the wild).
- Compare the conditions found in your garden (shade or sun, dry or moist, etc.) to the conditions required by a variety of native plants that you're interested in growing and that are commercially available in your area. The native plants will thrive in your garden when you match the plants to the condition – woodland plants for shade, sun-loving plants for meadows and prairies, wetland plants for moist areas.
- Water young transplants for the first six weeks after planting. After that, they should thrive without supplementary watering.
- Design your native plant garden in whatever style appeals to you – from formal to informal – but if you're going for a wild look, it might be a good idea to investigate your local bylaws.

Information Sheet #7

How Does Your Garden Grow?...

PRACTISE CARE-FUL LAWN CARE

It is possible to have a healthy lawn without using synthetic chemicals simply by practicing "CARE'ful" lawn care. The principles are the same as those followed throughout the green garden: maintaining soil health and vitality, watering wisely and recycling nutrients.

- To maintain soil health, top-dress with a fine sprinkling of compost a few times during the growing season.
- Lawns require approximately 1 inch of water a week. If rain doesn't provide enough water, you may need to do some supplementary watering. This should be done in the early morning on a windless day (too much water is lost to evaporation by the sun during the middle of the day or on windy days).
- Place a small can by the sprinkler to see how long it takes for an inch of water to accumulate.
- Set your lawn mower blades at 3 inches. This is the ideal height for grass to shade out weeds and to keep the soil cool and moist.
- Cut no more than a third of the grass' height in one cutting and make sure your mower blades are sharp.
- Leave grass clippings on the lawn to slowly decompose and return their nutrients to the soil. A mulching mower/blade will distribute clippings evenly throughout the lawn.
- Gently remove thatch build-up in your lawn using a stiff rake. Compost the accumulated debris.
- Aerate compacted soil in the spring or fall.
- Leave any clover that appears in your lawn ; clover fixes nitrogen in the soil and thus improves soil fertility.
- Hand-pull weeds before they go to seed – this will prevent them from spreading in the garden.