

PESTICIDE-FREE LAWN & GARDEN	Problem	Solution	Environmental Factor Products
	Weeds in lawns	corn gluten meal	 <p>TurfMaize Pre-emergent Weed Seed Germination Inhibitor with Corn Gluten</p> <p>Turfmaize contains 98% corn gluten meal. It works by preventing the germination of dandelion and crabgrass seeds.</p>
	Grubs in lawns	nematodes	 <p>GRUB BUSTERS Nematodes avantageux Prédateur naturel de Mère Nature Natural et sans pesticides</p> <p>Grub Busters Beneficial Nematodes- Organic Certification pending</p> <p>The microscopic sized worm which seek out and kill most types of grubs.</p>
	Crawling & Flying Insects	insecticidal soap	 <p>Zap! INSECTICIDAL SOAP SAVON INSECTICIDE</p> <p>Zap! Insecticidal Soap</p> <p>Kills earwigs, mealybugs, aphids, spider mites, and whitefly and more!</p> <p>Use area: Greenhouse use on ornamental, tomatoes, peppers and cucumbers. Outdoors on ornamentals, trees, shrubs, flowers, fruits and vegetables.</p>
	Caterpillars	Bacillus thuringiensis subspecies kurstaki (Btk)	 <p>Bioprotec^{eco} POUR LE CONTRÔLE DES CHENILLES</p> <p>Bioprotec Eco- Certified Organic</p> <p>A naturally occurring bacterium which attacks digestive system of target pest. Ideal to control cabbage ooper, leafrollers, gypsy moth, forest tent caterpillar.</p> <p>Use area: Vegetables, fruits, shade trees, ornamentals and evergreens</p>

Above products are all exempt under City of Toronto Pesticide by-law

The above products work most effectively in combination with sound lawn maintenance practices like aeration, overseeding and other natural turf care techniques.

10 Steps to a Natural Lawn

Whether your lawn has been treated with chemical fertilizer or not in the last three years, it will take longer to go natural. Lawns that have not been fertilized will contain more sand than humus. Prolonged treatment with chemical fertilizers destroy most of the micro-organisms in the top three inches of the soil. When going natural, soil enrichment will lead to a healthier lawn.

Step 1. **AERATE, AERATE, AERATE.** This is one of the most important steps to a healthy lawn. Aeration permits oxygen, nutrients and water to enter the soil, speeding up the microorganism activity that breaks down food. Earthworms and ants will also aerate the soil. Chemical fertilizers and pesticides not only harm unwanted pests, they harm beneficial insects like earthworms. Aeration should be done every spring or fall.

Step 2. **FALL FERTILIZER APPLICATION.** Use a slow release fertilizer or add compost as a soil augment, this allows the grass plant to store nutrients over the winter, thus making them available in the spring. A low 6-1-3 can be added to your lawn for a green-up; but only use a natural fertilizer. Compost can be spread on your lawn in spring if you did not do it in the fall.

Step 3. **OVERSEED.** Put down a pest-resistant (and guaranteed weed seed free) seed in the fall. If you did not do this in the fall, you can do it in the early spring after the last frost. Fall is the best time to over-seed.

Step 4. **BALANCE YOUR SOIL.** Take a soil sample and do a pH test. Test kits can be picked up at the Environmental Factor or your local garden centre. Soil pH should be around 6-7; this is the best condition for grass to grow. To amend your soil add some gypsum to change you pH level.

Step 5. **MOW AT 2 1/2-3 INCHES.** Mowing at this height results in good root development, and leads to denser turf, shading out weeds and conserving your soil's moisture.

Step 6. **PROPER WATERING.** Watering should not be done in the spring. Water your lawn for an hour once every 5 days to encourage roots to grow deep into the subsoil. Morning is the best time to water. Avoid night watering as this encourages mold and disease.

Step 7. **RAKE LAWN IN LATE SPRING.** Wait until any new grass has grown and the soil has dried up enough to walk on it before doing a hard raking. This will remove any dead grass or thatch. Once this is complete add compost and seed to bare spots if needed.

Step 8. **USE BENEFICIAL NEMATODES.** Grub Busters nematodes are an all natural pesticide free way to seek out grubs and many other root zone pests in turf.

Step 9. **REMOVE WEEDS BY HAND.** When hand pulling weeds, remove the entire root. For easier removal use a dandelion fork, or wait until after it rains.

Step 10. **USE CORN GLUTEN MEAL.** Corn gluten meal is one of the best commercially available natural fertilizers. Corn gluten meal can now be used as a natural herbicide under the brand name TurfMaize.