



Pesticide Free: Spring Tips for March, April and May

Spring is here!

- Towards the end of March to beginning of April, or when snow has melted, look for signs of lawn and insect disease.
- In March and April, start by raking up leaves and any other debris on the lawn.
- Consider your ultimate goal for lawn and garden appearance and then work on a plan for refurbishment and design.

pH balance tests for lawn and garden

It is always a good idea to test your lawn and garden soils' pH balance. Soil pH balance, whether acidic or alkaline, is very important to know when considering the best feeding programs for grass and plants. A proper balance in soil helps blades of grass and plants utilize the most in nutrient feeding.

Lawn soil pH balance should be between 6.0 and 7.0/7.5. Vegetable and flower gardens soil can range in pH, depending on type and variety of plants in the soil. All pH test kits will have a colourful indication chart to follow to help determine your next course of action. pH soil test kits for homeowners come in a meter probe style or reusable plastic kit.

If the soil is too acidic (pH less than 6), use calcium/magnesium enriching soil amendments, such as dolomite lime (slow release), dolopril (fast release) and calcium enriched alfalfa pellets to raise soil pH.

If the soil is too alkaline (pH greater than 7.5), use sulfur to lower pH to a more neutral state. Examples include sulfur pellets and sulfur flour.

Compost for conditioning

Compost, animal manures and natural soil amendments help condition and promote a healthier soil while encouraging and stabilizing pH balance. Apply the soil amendments or compost after lawn has been raked and aerated. Amendments (such as alfalfa) naturally fertilize and amend soils with nitrogen, phosphorus, potassium and calcium rich components that help stabilize pH balance. Other natural soil amendments to apply in spring and fall are soybean meal, seaweed/kelp meal and fish liquid emulsion.

Compost tea fertilizer

Compost tea is made from animal or plant base and is great for reducing thatch build up in turf, promoting disease resistance lawns and establishing a healthier turf for years to come. Compost tea should be applied three to four times from spring to fall. Bacterial compost tea is best for lawn and garden. Fungal compost teas are excellent for trees and shrubs.

Compost tea fertilizers encourage healthy soils promoting natural protozoa, beneficial microbes, beneficial nematodes while promoting disease and insect resistance. Use Compost tea as an option for fertilizing and establishing a healthy lawn.

Raking and de-thatching lawn

Rake or de-thatch your lawn using bamboo, steel, or plastic rakes. De-thatch with a mechanical machine that uses tines for removing deep, stubborn layers of grass blades and debris. Removing thatch build up encourages water and fertilizers to leach into soil down to root systems, creates fewer fungal and bacterial problems and discourages insects from thriving on turf blades and root systems

Synthetic granular or liquid fertilizers

All fertilizers have a certain percentage of nitrogen, phosphorus and potassium. Most fertilizer varieties will have added trace minerals such as copper, iron, magnesium, zinc and sulfur. These elements are crucial to proper blade, stem and root growth. Nitrogen is for the greening of the blade, phosphorus is for encouraging root system, and potassium is for the overall structure and disease resistance of the whole plant. For flowers, the phosphorus helps with colour of flowers and potassium is for blooming and vigour of the plant. Phosphorus is an important element for root vegetables such as potatoes.

For more information:

kelowna.ca/environment
pesticidefree@kelowna.ca
250-469-8881



When planting new sod, or broadcasting a new seed area, apply a starter fertilizer with numbers on label such as 10-30-10. The middle number is what encourages root system to grow in soil. Broadcast fertilizer first before sowing seed or laying down new sod. Sod or seed is best started in spring or fall when temperatures of air and soil are cooler and watering should be done on a daily basis. Usually a newly seeded area takes 7 to 15 days to germinate and in extreme heat temperatures should be watered a couple times a day. New sod should be watered also on a daily basis until established.

Irrigation

For established lawn refurbishment or rejuvenation including aeration, soil amendments and seed application, water infrequently 2 to 3 times a week for 20 to 30 minute intervals. Automatic drip watering systems on timers are best to use for turf areas. Soaker hoses and drip irrigation is best for watering flowers, vegetables, shrubs and xeriscaped gardens.

Corn gluten meal to control weeds

Corn gluten meal can be used as a pre-emergent weed seed destroyer. It is excellent for controlling crabgrass, quack grass, dandelion, black medic, clover and all lawn weed seed. This product works by destroying the soil surface so weed seeds cannot germinate on the existing area. Corn gluten meal is a product that needs to build up in soil for total weed seed controlling.

Apply corn gluten meal in mid to late April here in the Okanagan. Apply it again six to eight weeks later so it builds up in the soil. You can broadcast granular corn gluten meal up to three times in the season. This product builds up in soil and in two years you will notice a difference in weed seed germination.

Note: corn gluten meal does not destroy existing weeds. You must manually pull out these weeds or use an organic pesticide product. Corn gluten meal also does not know the difference between a weed seed and a grass seed, meaning overseeding with grass seed would be best done in the fall if using this product as an option for controlling weed seed germination in soil. Apply approximately 9 kilograms per 1,000 square feet.

Corn gluten meal as a fertilizer

As a natural/organic nitrogen fertilizer, corn gluten meal is ideal for fertilizing the lawn. The nitrogen percentage makes corn gluten meal ideal for greening of turf blades. Look for handy liquid corn gluten meal in a container that attaches to a hose as another option for weed seed controlling. Most containers will fertilize approximately 2,000 square feet of existing lawn. Do not irrigate for at least 12 hours after applying corn gluten meal.

Beneficial nematodes

Beneficial nematodes are nature's way of destroying insect pests in and on the soil. They are a microscopic worm and are harmless to pets, people and even earth worms. Beneficial nematodes seek out and kill soil-inhabiting insects above ground and many stages of insect larvae and grub in the ground.

The middle to end of April is a great time to incorporate beneficial nematodes. Daytime air temperature should be over 8 degrees Celsius consistently.



In the Okanagan, there are two varieties of beneficial nematodes that control the best: Heterorhabditis Bacteriophora and Steinernema Carpocapse Nematode.

Heterorhabditis Bacteriophora Nematode is most effective against beetles, grubs and weevils and many other deep soil insects.

Steinernema Carpocapse Nematode waits near the surface of the soil and attacks moving pests. This nematode is most effective against flea larvae, caterpillars in the lawn, garden and soil where larvae pupates. Other target pests include codling moth, cutworm, armyworm, leafminer, ants, sod webworm, flies, loopers, wire worm, fruitfly and many others.

Fertilizers cont'd

Manmade fertilizers have synthetic nitrogen in a slow release or fast release form. Slow release nitrogen will have a coating to allow for six to eight week fertilizing. Use slow release fertilizers with numbers such as 24-4-10 or 18-6-12 or of similar sequence. This number represents the Nitrogen, Phosphorus Potassium (NPK) ration. All three elements of NPK are important in the function and growth of healthy turf. A slow release fertilizer slows down the process of growth creating less stress throughout the heat and drought of the summer months.

Two forms of synthetic fertilizers to apply are granular or water soluble. Granular products can be applied with a drop or broadcast spreader and are calibrated by instructions on back of packages. Water soluble fast releasing fertilizers are mixed with water and applied by hose end, pump sprayers, irrigation systems or watering can. Be careful when applying synthetic fertilizers to not use more than is recommended on the label. Burning and salt build up are examples of too much fertilizer applied and can be harmful to turf blades.

Normally synthetic granular fertilizers come in spring, summer, fall and/or winter applications. Do not apply granular synthetic fertilizer more than three to four times from spring to fall. Liquid or water soluble synthetic fertilizers can be applied every 14 to 21 days from spring to fall.