

The Parks of West Bedford

Lawn Care Best Management Practices



Home Owners' Guide





THE PARKS
OF WEST BEDFORD

EMBRACING NATURE. ENJOYING LIFE.

West Bedford Holdings Limited – Our Commitment

West Bedford Holdings Limited is dedicated to developing residential communities that are sensitive to low impact and sustainable development. Our goal is to not only plan and design residential communities that are responsible, sustainable and functional, but to inspire our homeowners in the Community to learn from their decisions and to develop a greater appreciation for the environment and its resources. For this reason we challenge you the homeowner to better understand your environmental responsibility within the Papermill Lake watershed.



The following Homeowner's Best Management Guideline will serve as a critical educational tool that each family should review and understand in order to preserve and enhance our most precious natural resource...Water!

Stop Runoff

Use a Rain Barrel

Rain barrel usage can be important to the overall success of the stormwater management system. The benefits of using a rain barrel include:

- ▶ Stormwater that washes off rooftops and into downspouts is caught and retained.
- ▶ Homeowners use the water in the rain barrel as needed during the growing season.
- ▶ Water can be reused as needed in the garden or lawn landscape.
- ▶ Reduces stormwater runoff and pollution by providing treatment to the “first flush” of contaminants.
- ▶ Easy Installation – suitable for all property types.
- ▶ Reduces water bills by not using potable water for irrigation.
- ▶ Water generated is very soft (low in minerals), which is good for plant growth.

The proper design, siting and maintenance practices are necessary to ensure that the rain barrel is functioning appropriately and not becoming a nuisance or mosquito breeding ground in the development. The following guidance is intended to provide the proper siting, mosquito control and maintenance practices for your rain barrel.

Finding the best location for your rain barrel

To find the best location for your rain barrel, the following techniques are recommended:

- ▶ Place rain barrel on a hard, level, and pervious surface. Concrete blocks, bricks, decorative blocks, or flagstones work well as a base.
- ▶ Locate rain barrel at downspout nearest to the garden you want to irrigate.
- ▶ Rain barrels work using gravity to drain – The garden to be irrigated should be lower in elevation than the rain barrel.
- ▶ Ensure that the rain barrel overflow location directs water towards your yard and not your neighbors.



What about those pesky mosquitoes?

Many homeowners worry that rain barrels will create a breeding ground for mosquitoes. The following is a list of tried and trusted techniques that can be employed to control mosquitoes:

- ▶ Ensure that the mosquito proof screen on the rain barrel is installed and functioning correctly.
- ▶ Ensure that the base is pervious, so overflow does not collect and leave standing water for mosquito breeding.
- ▶ Inspect rain barrel weekly – ensure that the lid is securely closed and the water is free of organic material.
- ▶ Mosquito larvae require 6-9 days to hatch. Completely drain the barrel once per week and clean if necessary to prevent the formation of stagnant water.



When properly encased with a mosquito proof screen, rainbarrels will keep out any mosquitoes from breeding.

How do I take care of my rain barrel?

To properly care for your rain barrel, the following techniques are recommended:

- ▶ Keep spigot closed when not using water.
- ▶ Routinely inspect gutters, downspouts, rain barrel intake and mosquito screens for debris.
- ▶ Keep lid secured and screens clear of debris. Make sure the overflow tube and hose are functioning correctly.
- ▶ If odours develop, drain the rain barrel and spray with a hose until clean.
- ▶ Completely drain rain barrel before winter – leave spigot open during the cold months so water does not accumulate and freeze.
- ▶ Ensure that the overflow is draining properly and not causing erosion of the rain barrel base. An example overflow valve is shown in the above figure.
- ▶ Rain barrel water is not potable – *do not drink the water.*

Go-Toxic Free

Lawn Fertilizer

There are many natural ways to fertilize a lawn before reaching for a store-bought fertilizer. Compost and grass clippings are a cost-effective and environmentally friendly way to provide your lawn with nutrients. If you feel the need to purchase a fertilizer to care for your lawn, use organic fertilizers or slow release fertilizers.

- ▶ Clean Nova Scotia indicates that generally a 4:1:2 (the ratio of nitrogen to phosphorous to potassium) fertilizer applied at rate of 1 kilogram nitrogen per 100 square metres (2 pounds per 1000 square feet) provides the proper balance of nutrients.
- ▶ Combine the fertilizer with organic material (a mixture of good-quality soil, sand and a source of humus) and add this to your lawn's surface.
- ▶ Use a slow release or organic fertilizer before a rain (follow labels). If rain is not expected, water the lawn prior to fertilizing.
- ▶ Know your nutrient needs by understanding your soil and lawn conditions (most people apply too much fertilizer and this impacts water quality as well as lawn health).
- ▶ Go natural! Forget chemical fertilizers and replace your lawn with native plantings. There are over 1,500 to choose from for our region!



Organic fertilizers are often overlooked as an effective method for lawn care and maintenance.

Create Rain Gardens

A rain garden is a landscaping feature you can build to manage runoff. A rain garden will collect rain water and slowly filter water into the ground. They are usually a constructed depression (10-20 cm deep) that is designed to look like a natural area, but it will accept, infiltrate and clean stormwater. The rain garden will typically fill up with a few inches of water after a storm and within 1-2 days, the water will slowly filter into the ground. It is planted with wet and dry tolerant plants to absorb rain water. This technique encourages the recharge of the groundwater aquifer and uses the soil filters out any pollutants before the infiltrating water reaches the local groundwater table. When combined with a disconnected roof leader (downspout), the stormwater can be conveyed into the rain garden via a vegetated swale creating a high value natural landscape.



Rain gardens serve both a practical and aesthetic purpose; to clean and manage water run off, while creating a more beautiful landscape.

Keep it Green

Lawn Irrigation

One of the key ways you can help to keep lawn care more sustainable is by thinking about how you keep your lawn irrigated. Turf grasses and other plants in a native landscape need water for growth and development. By implementing proper irrigation practices, lawn quality and aesthetics will be improved, while at the same time, lowering water bills. By watering infrequently and deeply you can help improve the health of your lawn. The following techniques will put you on the path to proper lawn irrigation practices and prevent over watering:

- ▶ A typical turfgrass requires 2.5 cm of water per week (through rainfall or irrigation), which will soak the upper 10 cm of soil.
- ▶ Monitor your irrigation by placing a can in path of sprinkler flow and stop irrigation once 2.5 cm of water has accumulated in the can.
- ▶ Ideal irrigation times are when temperatures are cooler in the early morning or early evening and when wind speeds are low.
- ▶ Let lawn completely dry out between irrigation intervals. The soil should be difficult to penetrate before irrigation.
- ▶ Lawns require water when the grass turns light-green to brown in colour and the stalks remain bent over after being walked on.
- ▶ Stop irrigation when puddling or runoff occurs. Excessive moisture can potentially cause fungal disease in grasses and also prevents grasses from extending deep roots.
- ▶ Where possible, reuse collected stormwater from rain barrels for irrigation of gardens or smaller areas.
- ▶ Use sprinklers with uniform water application patterns. Do not aim sprinklers in a pattern that will water sidewalks, driveways, or the sides of homes.
- ▶ Without watering, most lawn grasses will go dormant over the hot summer months. This should not be a concern and the grasses will begin growing again during the cool season months.

Pet Clean-Up

Pet waste is a health hazard and a pollutant as it contains excess phosphorus and harmful bacteria which can harm lake water quality. The following guidelines will provide for the proper cleanup of pet waste and the elimination of any health concerns due to contact concerns:

- ▶ Clean up all animal waste whether on your lot or on trails or other places in the community.
- ▶ During walks, bring a bag and dispose of the waste in the toilet, garbage, or a designated pet compost area.
- ▶ In your yard, encourage pets to use one location. This will make clean-up easier and this area can be isolated from the rest of yard, which can prevent accidental contact with the pet waste.
- ▶ Do not feed Geese - It encourages them to frequent your yard and generate waste in your yard, driveway, or sidewalks.
- ▶ Pick up after pets before cleaning patios, sidewalks or driveways. Do not spray waste onto streets or into gutters.

Pesticide Use

Pesticides should be applied only as a last resort, or not at all. The major source of pesticides in urban streams is home applications to kill insects and weeds in the lawn and garden. If you need pesticides, certain pesticides may be permitted. Visit the HRM website, <http://www.halifax.ca/pesticides/rules.html> for more information.



Naturalize

Use Native Species

Many native species are suited to growing in a wide range of ecological conditions and they are usually best suited to the Nova Scotia climate. Because of this, once they are established they usually require less care and are a key element in creating a low maintenance and sustainable landscape. The species listed below are considered to be the types of species that would most usually found in the Parks of West Bedford area, however, use of other native species may also be appropriate. Final planting decisions should be made based on specific site conditions, species availability, and advice from landscape specialists.

Native Trees & shrubs best suited for certain site conditions:

- ▶ Dry/Poor Sites: Black Spruce, Balsam Fir, White Pine, Red Pine, White Birch, Grey Birch, Red Oak, Trembling Aspen, and Largetooth Aspen.
- ▶ Moist/Poor Sites: Black Spruce, Red Maple, Eastern Larch, and Balsam Fir.
- ▶ Average Sites: Red Spruce, White Spruce, Eastern Hemlock, White Pine, White Birch, Yellow Birch, Red Oak, Red Maple, and Sugar Maple.
- ▶ Moist/Rich Sites: Red Spruce, White Spruce, Eastern Hemlock, Yellow Birch, Red Maple, Sugar Maple, White Ash, and Ironwood.
- ▶ Native Shrubs: Wild Raisin, Serviceberry, False Holly, Canada Holly, Velvetleaf Blueberry, Lowbush Blueberry, Lambkill, Bush Honey Suckle, Huckleberry, Witch Hazel, Speckled Alder, Labrador Tea, Rhodora, Mountain Ash, Teaberry, Spirea, Striped Maple, Mountain Maple, and Beaked Hazelnut.





Lawn Mowing

The frequency, height, pattern and condition of a lawn mower can impact the quality and sustainability of a lawn landscape. The following items provide a recommendation for maintaining your lawn through proper lawn mowing practices:

- ▶ Always use a sharp blade – A dull blade will damage the remaining grass blades, potentially stunting future growth.
- ▶ Always mow when the grass is dry
- ▶ Mow at regular intervals (every 5-7 days).
- ▶ Cut grasses to a height of 6-8 cm. Higher cut grass will shade out weeds and encourages deep root growth.
- ▶ Never mow more than 1/3 of the grass blade – This puts additional stress on the grass, potentially stunting growth.
- ▶ Use a mulching lawn mower and leave grass clippings on yard. The cut grass will contribute nitrogen to the soil and reduce fertilizer use on the yard.
- ▶ Avoid mowing when turf is under heat and drought stress.
- ▶ Alter the pattern with each mowing event to reduce wear on the grass surface.
- ▶ Wear appropriate safety gear, which includes long pants and shirt and eye/ear protection.
- ▶ Use a low emission lawn mower. According to Canada's **Clean Air Foundation**, a standard gas mower will emit the same amount of air pollutants in one hour as driving a new car for over 550 kilometers.

Keep it Green

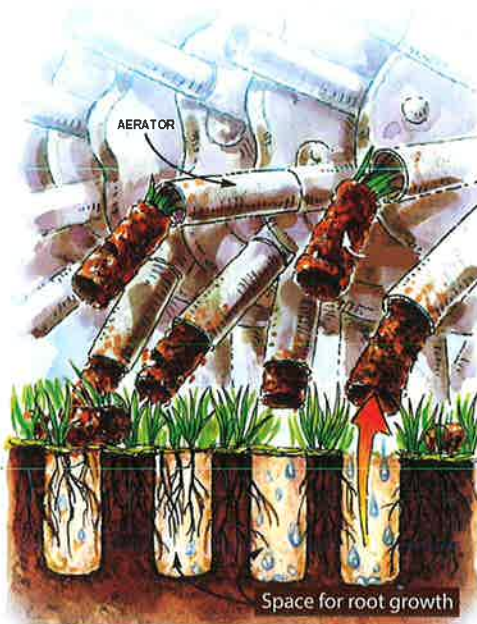
Dethatching

Thatch is a layer of living and dead organic material that lies on top of the soil that can be a home to insects and fungus spores as well as prevent water, fertilizer and air from reaching the soil. The information below provides information how to avoid thatch formation and the removal of thatch should it become a problem:

- ▶ Avoid over fertilization and excess pesticide application. Thatch buildup is typically due to excess nitrogen and pesticide in the growing zone.
- ▶ Mulching lawnmowers do not cause thatch buildup. If thatch buildup becomes a problem, maintenance will be required on a yearly basis.

The following options are available for thatch removal/control:

- ▶ Aeration - Mechanical aeration equipment will break up the thatch, allowing air to penetrate the soil and enhance thatch decomposition.
- ▶ Heavy Raking- A manual removal method for thin thatch layers.



Regular ground aeration is vital for a long-lasting and healthy lawn.

Manage your downspouts

Roof leaders (downspouts) at the Parks of West Bedford where ever possible are directed to lawns and vegetated areas to recharge groundwater. The installation of a downspout diverter can help you to direct water to certain areas on your lot. Benefits of this technique include:

- Low cost alternative that directly reduces stormwater runoff.
- Allow management/ use of stormwater on the property.
- Reduce water bills by using stormwater to irrigate lawns and gardens.
- Reduce the volume of stormwater runoff to end of pipe facilities.



Downspouts should drain the water away from any impervious areas, such as the foundation or driveway, and into vegetated zones.

Get with the Program

Get to know your site

Getting to know your site is critical in helping you to create a more sustainable landscape. Consider the following options in caring for your land:

- ▶ Be sure you are not removing desirable native plants that are already well adapted to your site.
- ▶ Consider how much sunlight your site gets over the course of a day.
- ▶ Know your soil type! Does your soil hold moisture? How quickly does it drain? This can help you in choosing the right species and stormwater management techniques.
- ▶ Plant a diverse mix of native species and understand how your chosen plants might 'creep' into adjacent areas.
- ▶ Over time, the cost of using native plants for landscaping is less than non-native plants. Think of our plants as long-term investments that can be phased in as your budget allows.
- ▶ Make sure plants are not dug from the wild. This depletes the resource and many species do not thrive after transplanting.
- ▶ Consider interseeding (no till) or plugging plants into existing vegetation in places such as thin lawns, or sparsely vegetated old fields. This can result in fewer new weeds.
- ▶ Consider using shade trees to screen your home from the sun. They help keep you comfortable, and save money on air conditioning.



Green Bin Composting

We are lucky in HRM to have an advanced recycling program that can help us in managing our waste. Significant accumulations of grass clippings, leaves, pruned branches, and other vegetative material are typically produced during the growing season. The following guidelines outline the proper handling of these materials to help sustain a low maintenance landscape:

- Use your green bin for leaves & brush, and house & garden plant waste.
- Excess leaf & yard material can be placed alongside the cart using orange or clear plastic bags or heavy paper bags - 20 bag limit, 25 kg (55 lb) maximum weight per bag.
- Branches should be tied in armload - sized bundles - maximum 5 bundles. Each bundle not exceeding 34 kg (75 lb) and no individual piece in the bundle more than 4 feet long (1.2 m) or larger than 8 inches (0.2m) in diameter.
- Create your own compost for your landscape needs. Learn more from HRM at <http://www.halifax.ca/wrms/backyardcompost.html> or the Resource Recovery Fund Board at www.putwasteinitsplace.ca
- Leave grass clippings on the grass. If possible, use a mulching mower, which will spread the grass clippings through the grass and put nutrients back into the soil.
- If a mulching mower is not available, dispose of grass clippings in your green bin or compost, or spread clippings in a vegetable or flower garden, as a mulch under bushes or add to the soil.
- Rake leaves, seeds, and grass clippings out of the street and gutter.
- Do not dispose of organic debris by dumping it in or near water bodies or sewers.



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