# **Outdoor Environment**

Your company's grounds and gardens play a crucial role in your sustainable journey. Thoughtful landscaping can save costs, help filter pollution and improve stormwater management-which will in turn benefit local ecosystems and habitats. Sustainably designed landscapes and outdoor environments not only telegraph your values to visiting customers and guests, but also provide a healthy, relaxing setting for your employees to enjoy-even in an urban setting.

## Quick Start



Use native vegetation as an alternative to grass. These plants require less fertilizer and water to grow, and also can create natural habitats for insects and wildlife. Check out Evergreen's Native Plant Database to learn about native plants for your province, or speak with someone at your local greenhouse.

## Landscaping

 Consider using organic fertilizers and repellents in lieu of chemicals. Instead of synthetic fertilizers, use compost from kitchen scraps, leaves and grass clippings.

## Try This!

Planting marigolds around your yard works as a natural bug repellent; the flowers give off a fragrance that flying insects prefer to avoid.

- Consider removing your lawn and replacing it with hardier native plants that require less water, or equally low-maintenance ornamental grasses.
- Be careful not to clear or eliminate existing plant cover, which can lead to erosion.
- When mowing, leave the grass clippings behind. They help the soil retain moisture and act as a natural fertilizer. For small lawns, save energy costs and get some exercise by switching to a push mower.
- Avoid introducing non-native species. Some provinces require landowners to eliminate noxious weeds from their property. Consult local government resources, guidebooks and online references to ensure you don't inadvertently introduce an invasive species to your property.

## Try This!

How have invasive species spread so far and wide? Well, they often "hitch a ride" on clothing, boots or vehicles. If your business involves travel around the countryside, stop to check your boots, clothing and vehicle undercarriage for any plant material that you might have unwittingly acquired along the way. Halting the spread of invasive species promotes biodiversity and helps to conserve native species.

## Try This!

Don't have the time or the staff to look after your green spaces? Try offering up your vacant flowerbeds to a local seniors centre, school or community youth group. These groups may welcome the opportunity to offer their members activities such as planting flowers and groundskeeping in your gardens or to provide learning opportunities for students. Encourage your staff to help out as well-it can be a great exercise in community relations for your business and your workers can enjoy a breath of fresh air over their lunch.

## Green Roofs

Want to see the future of greenspace? Look up. An increasing number of homeowners and businesses are planting green roofs, and reaping the benefits.

Green roofs:

- ◆ Improve local air quality
- Enhance energy performance
- Reduce costs associated with heating and cooling
- Create habitat for butterflies, birds and other pollinators
- ◆ Improve stormwater management by absorbing up to 80% of rainfall
- Act as natural noise barriers and absorb outdoor sounds.

If you are considering a green roof, you should ask an expert for advice specific to your situation. Ask local landscape contractors and designers if they have experience working with green roofs. Three organizations that offer general information about different kinds of green roofs, retrofit installations, plus suitable plants and maintenance are:

Green Roofs for Healthy Living City of Toronto (green roofs) Green Garage

#### Water

Your landscaped areas-think trees, shrubs and flowerbeds-require irrigation. Here are a few tips to reduce the amount of water required to keep your grounds looking beautiful.

- Consider installing a "grey-water" system. Treated grey water can be used on lawns and gardens, lessening the need for potable water and reducing your water bill.
- Water the lawn no more than once weekly, depending on rainfall and temperatures, and only when needed. Lawns require no more than 2.5 cm of water weekly, including rainfall.

#### Water Efficiency

The Toronto Botanical Garden harvests rainwater to irrigate, saving a significant amount of potable water and money. The setup captures rain falling on the roof garden and stores it in a large cistern. The organization also conserves water with waterless urinals and low-flow toilets. Taken together, the improvements have reduced potable water consumption at the gardens by 21%.

 Try to water early in the day. Under the hot sun, you can lose as much as 30% of your water to evaporation.

#### Try This!

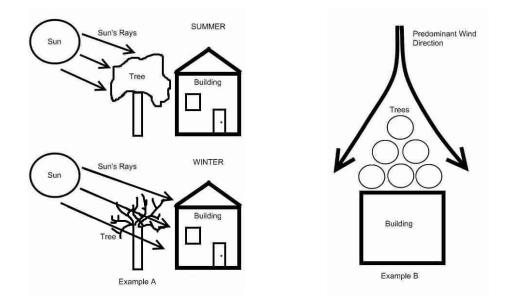
Set up a rain barrel and collect rainfall as your water source for watering your grounds and plants. Screen the barrel to keep out mosquitoes. Rain barrels are easily available at garden centres or you can make one yourself with an old barrel.

- When you irrigate, soak the lawn down to the roots. Doing so allows you to water less frequently.
- Consider a drip irrigation system that will distribute the water exactly where it's needed.
- Keep grass at least five cm high to better retain moisture, and mulch around plants to reduce evaporation.
- Selectively plant drought-resistant varieties over time.
- Reduce water runoff by planting trees.

#### New Development

If you are developing a new site, remember that smart landscape planning can contribute significantly to cost savings on your energy and water bills. Well-designed landscapes also create a welcoming environment that highlights your stewardship and environmental commitment to clients and guests.

- When designing the site layout, orient structures to make the best use of sunshine, breezes and other passive energy sources. This can help to reduce energy heating and cooling costs.
- Consult with a landscape professional for site planting ideas that can:
  - Create shade to block out the sun in the summer and reduce cooling costs (Example A)
  - Allow sunshine in the winter and cut down on heating costs (Example A)
  - ♦ Block cold winter winds and reduce heating costs (Example B).



- Consider identifying, preserving, protecting and reusing historical or culturally interesting elements and buildings.
- As much as possible, try to cluster your facilities in previously developed areas and/or minimize disturbing vegetation.

## Try This!

If you are considering a new fence, think about a living fence made of trees, shrubs, hedges or even bamboo. Living fences can offer you a unique look for your property; they also provide habitat for wildlife and help sequester carbon dioxide.

## Top Five Tips to Create a Sustainable Outdoor Environment

- 1. Take advantage of regional climate, sun angles and wind to maximize both solar gain in winter and shading in summer.
- 2. Use permeable materials such as gravel, block paving or "grass" pavers instead of asphalt or concrete to allow water to percolate into the ground.
- 3. Adjust the blade height on your lawn mower. Most grasses suffer when too much is cut off at once. A short lawn increases evaporation from the soil. Mow it often enough so that you're never cutting more than a third of the blade's length at one time.
- 4. Keep information available for guests about important local and native species in the region, such as guidebooks, park information, etc.
- 5. Make your own fertilizer. Use kitchen scraps, grass clippings and leaves to create your own mulch and add nutrients to your lawn and flowerbeds.

## Further References

Check out these Canadian websites for more advice on natural and organic lawn care:

Organic Lawn Care Project (Manitoba Eco-Network) Reducing Pesticides (City of Toronto).

## Scenario: Bringing Glory to the Grasslands

Stan owns the Cloud Hills Wildlife Museum & Gift Shop, located in a heritage building near the entrance to Saskatchewan's stunning Grasslands National Park. The museum's grounds are beautifully manicured, but they demand significant and ongoing investments of time, energy and resources to maintain.

Stan has been thinking about the ecological impact of his plantings. He knows he is on the doorstop of a spectacular natural preserve, but at the same time he is reluctant to make any dramatic changes that might detract from the beauty of his property.

The entrepreneur has a casual chat with the park warden, who explains that many threatened and endangered species of native plants grow on the region's mixed-grass prairie. Stan decides that next spring, in lieu of non-native ornamentals that require extensive watering and care, he will plant a small native prairie garden highlighting species that can also be found in the park. Park staff note that he will not have to water the natives; the flora should thrive under normal rain conditions. They also agree to give Stan ideas for what to plant, and information that he can distribute to customers who enquire about his garden.

Stan expands his native prairie garden into an area formerly covered with turf, but leaves a large stretch of grass for his guests to enjoy for picnics, a game of Frisbee or running around with the dog. Even though he will be hanging onto some non-native grass, he resolves to maintain it in a more sustainable way. First he takes the sprinkler system off its timer, opting instead to evaluate each week whether or not the lawn requires watering. He will also run the sprinkler either first thing in the morning or in the evening after supper, and instead of leaving it on for just a little sprinkle he will make sure that the lawn gets a deep soaking.

Stan also invests in a couple of rain barrels for his downspouts. He sites them in conspicuous spots and paints them to match his building. The move tells his customers that he is making an effort to reduce water consumption, but doesn't impact the attractiveness of his grounds. Stan figures the barrels will hold enough to water all the various potted plants around the property, and even the prairie garden during dry spells.

After speaking with a landscape specialist at his local greenhouse, Stan decides to plant some native coniferous trees on the north side of the building to cut down the bitter wind that chills the building in the winter. He also decides to plant a couple deciduous trees on the south side, which will provide ample shade in the summer from the hot prairie sun, but will allow the sunlight through during the winter when the trees have no leaves.