



Blog

Helping Your New Plants Thrive

APRIL 14, 2022 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

by Samantha Cunningham

The first step in helping your new plantings is ensuring they are properly planted to start. Choose a location for your plant that is best-suited for its entire life-cycle. This includes checking its environmental preferences, for native species check out the [Native Plant Database](#) for this info. As well as ensuring the new planting will not need to be transplanted later in its life due to encroachment on pathways, water lines, and electrical wires for example.

There are two main categories of plantings: bare root, and container. Generally, there are three steps to proper planting:

1. Ensure the roots of the plant are healthy and able to expand outward when in the ground. This might require trimming of woody roots and/or anything that appears unhealthy.
2. Ensure your planting hole is the optimal size. The rule of thumb is for the hole to be 2-3 times the size of the original container or root spread. This ensures the soil surrounding the new plant is aerated and roots can easily move through.
3. Ensure you properly backfill/refill the hole once the plant is in the hole. You want to make sure that any chunks of soil are broken up before refilling. In a deeper hole you can consider filling the hole halfway, watering, and then completely filling the hole. This helps ensure moisture is found throughout the soil as well as assists in settling the soil. Avoid tamping the soil down with your feet as this can harm roots and cause compaction which is not good for plant or soil health!



Once your hole is filled, you can consider creating an optional soil berm around the base of the plant to funnel and hold water at the top of the root ball to be absorbed. Be sure not to plant your new planting too deep into the ground. Individual species needs differ. For example, woody plants need soil that is level to the root ball (where root meets trunk) as planting lower than that [can cause rot](#).

Once your plants are in the ground, it is time to really think about how to increase their likelihood of survival. The number one tip echoed by gardeners everywhere is...water! New plantings do not yet have an established root system that helps them get their water requirements from surrounding soils. Water new plantings frequently and thoroughly to avoid creating [wilting point conditions](#). Check watering frequency in accordance with your soil type and plant preference. For example clay-dominant soils will need less frequent water than sand-loam dominant soils. Adding 2-4 inches of mulch around — but not touching the stem — of the plant helps with retaining moisture and preventing competition for growing too close to your new planting. You can also add a hemp fibre mat (pictured above) which can reduce competition from grasses.

If you are trying to keep animals away from your newly planted species, you can use a variety of natural methods to try and keep them away. For the mammals who love a garden salad, a physical barrier like a mesh tent over the planting may be necessary while the plant establishes. For better odds, you can double up the physical barrier with a DIY spray that will not hurt the plant, the pest, or the surrounding environment. There are deer and rabbit-specific repellent recipes, as well as insect-specific repellents. Typically, these mixtures involve common household goods including water, dish soap, garlic, and spicy pepper, making them easy on the wallet and environment!

There is no one way to plant, and no one thing will guarantee plant survival. However, using any of the tips above can help give your new plantings the best chance of growing strong and tall. If you are unsure of where to start, check out our [Natural Edge Program](#) for some great (and free!) resources!



This blog post is part of an education and engagement series that is generously funded by the RBC Foundation through RBC Tech for Nature, a global, multi-year commitment to support new ideas, technologies, and partnerships to address our most complex environmental challenges. To learn more about Watersheds Canada's project that is funded through RBC Tech for Nature, please read this [media release](#).



Blog

Planting Your Own Pollinator Garden

MARCH 22, 2022 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

by Samantha Cunningham

One of the best things about creating a pollinator garden is the diversity of beauty that can be included! However, not all pollinator gardens welcome the same diversity of species. Bees are the most important and common pollinator type, with [over 800 species in Canada!](#) Luckily everyone's favourite gentle friend the bumblebee is not only cute, but a native species as well. Be sure to respectfully admire the [females who can sting multiple](#) times unlike the non-native honeybee.

Bees typically prefer open flowers with easily accessible pollen. A good choice of wildflower to support your local bee population is a native Vervain species, such as [Blue vervain](#) or [Hoary vervain](#). These wildflowers have beautiful slender purple buds and purple flowers that are favoured by bees and butterflies alike throughout the summer months.



Blue Vervain (Getty Images)

Similar to bees, butterflies and some moths are highly attracted to purple and cool-toned flowers. Unlike bees, butterflies have [a tongue](#) that allows them to access deeper flowers, and nectar. In addition to these needs, butterflies also require certain wildflower species to host their caterpillars. You have probably heard about [Monarch butterflies and Milkweed](#) – Milkweed species, such as

[Common Milkweed](#) and [Butterfly Milkweed](#) provide important habitat and food for many butterflies and moths. They are also low maintenance, flower into beautiful pink-toned bells throughout the summer, and keep unwanted bugs at bay! Make sure not to let anyone but the butterflies ingest it as it is both unpleasant to taste and [toxic in large quantities](#).

Moving over to the largest pollinators in Canada, let us talk about hummingbirds! They are another example of fascinating tongue history as the length is so long it has to coil [around their skull](#). Due to this long tongue, hummingbird species prefer flowers with depth, such as bell and trumpet shapes. A great wildflower family for this is Columbines, including [Yellow Mountain Columbine](#), [Western Columbine](#), and [Wild Columbine](#). Other native species such as [Harbell Campanula](#) is a great option for bees and hummingbirds, as well as looking just lovely all summer and into early fall.



When planning your pollinator garden, try to make your flower choices as diverse as possible. Choosing differing heights, colours, shapes, size flowers, and bloom time will help ensure there is something for every pollinator who needs it! Regardless of diversity, all the native wildflower species you plant in your garden will help to support your local pollinator populations. Check with your [local eco-region guide](#) for information on native species and suggested plantings. You can also use our [Native Plant Database](#) to show you the wide diversity of native plant species well suited for your area, including wildflowers.

Another important way to support pollinators is through maintaining a healthy environment past the garden boundary. Pollinators are incredibly sensitive to the use of pesticides, herbicides, insecticides, and other outdoor chemicals. Beyond pollinators, these chemicals are often harmful for [aquatic species](#) and [bird species](#). Methods like [companion planting](#) can help control unwanted insect species. Where more environmentally-friendly options are not possible, please ensure to use and store your lawn care products responsibly.

Additional Resources

Pollinator Garden sketch [infographic](#)

[Wildlife Garden Guide](#)



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Blog

Seed and Genetic Diversity

MARCH 7, 2022 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

by Samantha Cunningham

While environmental organizations often differ in purpose and mission, one thing we all agree on is the importance of native plant species. Our [Native Plant Database](#) and [Natural Edge program](#) are based on equipping landowners with tools to best naturalize their shoreline using native plants. The [Forest Gene Conservation Association](#) is another organization educating the public about native plants and the importance of genetic diversity in vegetation. Their primary focus is Ontario forests, but their principals apply almost universally. Flora and fauna require a large enough gene pool to ensure offspring have the best chance of survival. One way that nurseries, greenhouses, and growers ensure they have the best seed possible to grow their plants is by working with seed collectors.

Now I am sure you are asking yourself: what on earth is a seed collector?? Well, it is exactly what it sounds like! A seed collector is someone who goes out to healthy forest stands to gather the good seed from targeted species. Collectors then pass this seed to the people who treat, plant, and sometimes store the seed for upcoming seasons.

Recently I completed the final workshop in the Certified Seed Collector course offered by the FGCA in Southern Ontario. This course is a mix of classroom and hands-on learning about native species and their seeds. The certification is provided by Ontario's Natural Selections and utilizes *Seeds of Ontario Trees & Shrubs Field Manual for Crop Forecasting and Collecting*. This book is great to better understand everything vegetative related in Ontario, but other provinces have similar manuals as well.

Plant health starts with its seed. It is especially important to promote the health of native species as we all experience the impacts of climate change. Plants that come from a good seed stock and that are native to the area have a better chance of surviving turmoil environmental conditions. Vegetation is often the base of the food pyramid for animals, so by supporting native species you are helping to buffer your area from the effects of climate variations.

As a property owner you can help contribute to native species and their genetic diversity through your garden. By choosing plants that are native to your eco-zone, you are helping to support all of the other local species, both plants and animals. When choosing your plants for the season, go to local nurseries, greenhouses, and growers to support local business and local genetic diversity for your native species!



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Blog

Get to Know your Pollinators

FEBRUARY 28, 2022 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

by Samantha Cunningham

We often talk a lot about pollinators as a general grouping of insects we see in our gardens and hear about on the news. Recently, there are major concerns about the health of honeybee populations in North America and [how a decline in pollinators has many severe implications](#). Aside from honeybees, there are about 800 other species of bees in Canada, and as well as countless other species of butterflies, moths, beetles, and hummingbirds that are considered pollinators. Today we want to get to know some of Canada's lesser-known pollinators!

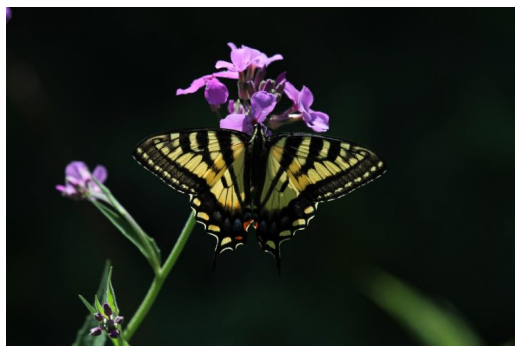
But first, an important side note. Bats are a critically important pollinator in North America, but [not present in Canada](#) as a pollinator. Supporting [Canadian bat species is still important](#) to maintaining a well balanced ecosystem. However, if you like [tequila or mizcal](#), you should especially care about bats as pollinators in other countries!

Bees

As bees are the most common and important pollinator (with over 800 species in Canada), let us get to know a native species found across Canada. The [Mining Bee](#) does indeed mine, or burrow, into the ground to make a nest and raise its young. These bees are only active in the springtime, which is why historically they were believed to be the [original primary pollinator of native fruit trees](#) and other food sources. Typically, they are a [fuzzy rust colour](#), and they are docile with their sting being too weak to penetrate human skin. In addition to being an important pollinator, these bees also help to [aerate the soil](#) through their nesting activities.

Butterfly

The Canadian Tiger Swallowtail present from the bottom tip of Ontario, across the country, and up past the Arctic circle. You can often find males [huddled around puddles](#) to get nutrients and water. They are a very common, and beautiful, pollinator species found in Canada. With a [wingspan of up to 8cm](#) they have a large wingspan to transport pollen! Swallowtail presence in your garden can also help to [deter predators](#) like birds and lizards.



Bird

Ruby-Throated Hummingbird is another species spread across virtually all Canadian provinces. Its presence is only in the warm months as these hummingbirds spend the winters in Central America. It has been proven that these hummingbirds fly the 800km over the Gulf of Mexico in a day and they [do not hitchhike on the backs](#) of other birds as previously thought! Another curious feature of these cool little creatures is their ability to [remember the placement of food sources](#) from the previous summer. If you are looking to attract some hummingbirds to your property, pick tubular shaped flowers, or use a [hummingbird feeder](#) and keep it in the same area of your property year to year. Make sure to keep the food source away from windows, and keep the space dedicated to hummingbirds and not near other bird feeders or food sources. This is because hummingbirds are very [defensive over their food!](#) Make sure to [regularly clean](#) your hummingbird feeder, too. While being beautiful and a great pollinator, ruby-throated hummingbirds also [consume smaller insects](#) like spiders and aphids, making them a great defence for your garden.



Male Ruby-throated Hummingbird (Simon Lunn).

There are over [1,000 species of pollinators](#) in Canada that support our agricultural industries and who are critical for general ecosystem health. Not only do these species complete the important task of pollination, they also fill other ecological niches in their environments. Supporting pollinators is a key component of promoting a well-balanced ecosystem on your property and beyond!

Pollinators are primarily [threatened by habitat loss and degradation, and pesticide use](#). As individuals, we can all do our part by avoiding the usage of harsh lawn chemicals and by planting native flowering plants wherever possible. A great place to start to naturalize your shoreline property is our [Natural Edge Program](#), including the [Wildflower Garden Guide](#), and [Native Plant Database](#) where you can see what native plant species are best suited for your eco-zone. Whether you create a designated pollinator garden or just add some wildflowers among your normal plants, every little bit helps to support these important creatures.

For everything pollinator-related, be sure to check out the [Pollinator Partnership](#).



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Blog

Top 5 Ways to Support Winter Wildlife

FEBRUARY 12, 2022 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

by Samantha Cunningham

Winter in Canada officially lasts a total of 4 months, although sometimes it can feel much longer! This season can be a difficult one, especially for wildlife. Canadian species have either evolved to migrate to warmer climates, hibernate, or adapt to these seasonal changes. Some of [these adaptations include](#) hibernation, storage food, physical changes, and other location dependent characteristics. The increased development of natural areas has placed stress on species throughout the year but particularly in the wintertime. The silver lining is that there are things you can do to help support your shoreline wildlife this winter.

1. Support Native Plants!

Prioritizing native species on your property has [year-round benefits](#). Native plants are more suited to Canadian climates meaning they are typically more winter hardy, and often fill an ecological niche throughout each season. For example, [black chokeberry](#) (pictured below) blooms lovely flowers in early spring that support pollinators, provides cover and edible greenery during the summer, then grows edible berries in the fall that last throughout the winter. Even native plants that do not act as a direct food source will provide valuable habitat and help [diversify the landscape](#). If you have specific animals you want to support or see, you can [look up native plants](#) they frequent and plant those species next growing season!



2. Naturalize your Shoreline!

A [naturalized shoreline](#) not only provides valuable habitat for animals year-round, but it can also provide benefits such as soil stabilization, flood mitigation, and climate control. It has been shown that some freshwater fish species [prefer the near-shore area during the wintertime](#), especially if the area has [overhanging vegetation present](#). As well, leaving areas of [woody debris](#), large cobbles, or other such natural features is beneficial in supporting both aquatic and terrestrial species. The [Natural Edge Program](#) can help support you in planning and planting your shoreline with your choice of native vegetation!

3. Limit your disturbance

The best way to limit your impact on the shoreline is to create pathways through your property and stick to them. This can be beneficial year-round, but especially impactful in the wintertime. Many terrestrial creatures take shelter in and under snow piles, typically at the interface between the snow and earth. Try to avoid near-shore activities that disturb the water under the ice. In winter, terrestrial or aquatic animals have metabolic limitations and finite food supplies. It is important that they [limit their movement](#) to preserve energy and not increase their risk of predation. There are options and opportunities to create or help enhance winter habitat, like [restoring in-water structures](#) for local fish species (pictured below).



4. Start planning for spring!

Nothing helps beat the winter blues quite like planning next season's gardens. Winter is a good time to look into local programs, like [Love Your Lake](#) and the [Natural Edge Program](#). You can also check out your local Conservation Authority or Lake Association for additional programs. If you are more of a do-it-yourself type person, check out the [Native Plant Database](#) to find native species for your eco-zone.

If you are planning to do major work along your shoreline or in the surrounding areas, look into environmental guidelines and local by-laws for any potential permits needed. This is especially important if you are doing any in-water work as spawning times of fish should be considered. Finally, winter is a great time to look back into your maintenance records and see if any upkeep is required. If you have a septic tank, when was the last time the honey-wagon paid a visit? If you have eavestroughs, do they need to be cleared out? Often, it is good to book these services ahead of time as they can book up quickly right when you need them.

5. Winterize your chemicals.

Any chemical compound, especially in liquid form, [should be stored](#) year-round in a cool, dry, well-ventilated place, away from heat sources, and in an area that is not susceptible to flooding. This can be in a garage or shed outside the home that is well set-back from your shoreline. It is important to store all materials according to the manufacturer's instructions. This is because many commonly used chemicals can freeze, expand, break their container, or leak if they are not stored correctly. These chemical spills pose a threat to human health and environmental health. The accidental leaching of chemicals into the surrounding environment or the cleaning of spilled chemicals can often lead to harmful contaminants entering the local watershed. Proper storage is also important to ensure the product is usable post-winter. For example, freezing will ruin many types of paint and alter the colour of the product, which would be a nasty surprise when you want to use it in the spring! Do not wait for winter to hit to store your fertilizers, pesticides, paints, and gasoline. Many of these common chemicals have a freezing point above 0°C. The best thing to do is to read the instructions on the label or look up the specific Material Safety Data Sheet (MSDS) online.

Winter can be a tough time out in the natural world, but by following these five simple tips and tricks, you can make a positive impact on your local ecosystems. Summer might seem like a long way away, but it is never too early to reach out to start planning for better weather. Watersheds Canada has many different [programs](#), partnerships, and [free resources](#) that are available to help you support your shoreline health.



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Blog

What, When, and How Much to Prune

OCTOBER 19, 2020 BY MONICA SEIDEL

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Pruning is a technique used to help support the growth of native trees and shrubs, and while it is not required, it may be a good option for your property to protect pathways, sight lines, or protect plants from neighbouring competitors. It can be a tricky and overwhelming task if you don't know what to look for or how to properly prune.

What Should I Prune?

First, you will want to determine which species you want to prune. It is best if you watch your property throughout the year while different plants are in bloom. You will notice their height, width, and if they block any important views or pathways. You may also want to identify different plants and see if they are native or non-native species. It may be the case that you want to pull a plant rather than prune it! Use the free [Native Plant Database](#) to see what species are native to your Canadian hardiness zone.

Once you have decided which species you would like to prune, you have to decide how much to prune. Branches that are dead, diseases, or damaged should be removed to protect the plant from further health risks.

When to Prune

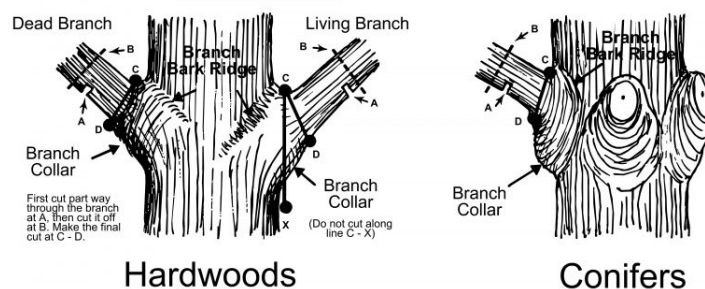
Pruning can cause stress to trees and shrubs so it should only take place while the plant is in dormancy. This happens in the late fall and early winter. Leaf loss in the fall is good indicator that a plant has gone dormant. If you want to prune a shrub that flowers, it is best to prune in the early spring before the buds emerge, or after the flowers have died. Removing the dead flowers can help the shrub leaf out by encouraging nutrients to access the leaves.

How Much is Too Much?

Pruning should never remove more than 25% of the crown of the shrub or tree. Branches should compose at least two-thirds of the shrub or tree to ensure that the vegetation has enough mature leaves to support growth and survival.

Once shrubs begin to show signs of aging, rejuvenation pruning can be done to encourage new growth. Gradual rejuvenation involves removing old growth by one-third every year until all old growth has been removed. Complete rejuvenation involves cutting the entire shrub back until just the stump remains – about 15-25 centimetres above the ground.

Proper Pruning Principles

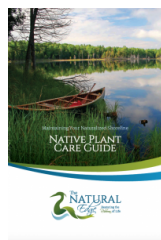


How to Prune

Cuts should be made on the branch that is to be removed at the branch collar (see diagram above). Pruning at the branch collar reduces the risk of unwanted damage and infestation, and allows for faster healing.

Tools and materials to prune can include: pruning shears, a hand saw, step stool or ladder, gloves, eyewear protection, a bucket, and tool cleaning solution. Infection and disease can spread from plant to plant via pruning tools. Be sure to clean tools after every tree or shrub before starting on another one. Possible disinfecting solutions can include one part bleach, dish soap, or pine oil cleaner in three parts water.

To prune, start by making a wedge shape cut, roughly one-quarter of the branch diameter on the underside of the branch. This wedge should be approximately 12cm from the branch collar. This wedge-cut is not intended to remove the branch. Next, approximately 20-30cm away from the branch collar, cut the branch completely, starting at the topside of the branch. This will leave a branch stub with the initial wedge cut. Finally, cut off the stub by cutting parallel to the collar. Cutting the collar can damage the tree or shrub by increasing healing time and susceptibility to infection.



This information, along with topics like mulching and watering, are explored in the Natural Edge Native Plant Care Guide. You can download a free copy of the Guide [here](#) or you can purchase a hard copy [here](#).

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Blog

Pollinator Champion Feature – Alan and Joyce

JULY 23, 2020 BY MONICA SEIDEL

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After retiring and moving to the countryside seven years ago, Alan and Joyce are enjoying the peace and quiet of life on the water. Having both grown up going to cottages for vacation, they now are able to spend more time in nature and enjoy the panoramic views with little evidence of people around. “Natural shorelines are important to us because it draws in more nature – plants and animals – to our property. We enjoy looking around and seeing and living beside the natural shoreline”, said Alan, a participant in the Natural Edge Program from Watersheds Canada.

The Natural Edge Program

The Natural Edge Program works with waterfront property owners to restore their shoreline by planting native trees, shrubs, and wildflowers. Each landowner receives a full-service restoration program, which includes a free site visit, and the creation of a shoreline restoration plan for their property using Watersheds Canada’s self-developed App. Each customized plan provides detailed descriptions of native trees, shrubs, and wildflowers suitable for planting based on their site conditions and preferences.

Compartment A

Naturalization Area

PH: normal
 DEPTH: potted, bareroot
 MOISTURE: normal, moist
 SOIL TYPE: sandy, loamy
 LIGHT CONDITIONS: partial sun



- | | |
|---|---|
| ● 1 Silver Maple | ● 4 Nannyberry |
| ● 3 Red Pine | ● 6 Staghorn Sumac |
| ● 8 Red Osier Dogwood | |



The ©Natural Edge Program was created by © Watersheds Canada 115- 40
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Alan and Joyce's custom planting plan was created using the Natural Edge App. Landowners walk their property with trained Natural Edge staff to pick appropriate tree, shrub, and wildflower species based on light and soil conditions, and aesthetic and height preferences.

By planting, Alan and Joyce are helping to improve their lake's water quality as native plants filter excess nutrients and toxins out of water run-off. Vegetated shorelines also stabilize the shore and reduce soil erosion as plant roots hold soil in place, a problem that their lake has been susceptible to: "we'd rather have erosion control that is natural, rather than human-made", said Alan. "In recent years we've lost four trees along the shoreline that have come down due to erosion".

Welcoming Pollinators to the Property

An additional benefit to participating in the Natural Edge Program is the anticipated increased presence of pollinators to the property. Wildflower species like Butterfly Milkweed, New England Aster, Black-Eyed Susan, and Wild Bergamot, and shrub species like Red-Osier Dogwood, Bush Honeysuckle, Chokecherry, Canadian Serviceberry, and Snowberry were all planted along their shoreline property to provide pollinators like bees and butterflies with food and habitat. While they "do see some hummingbirds, a few butterflies, and very few bees" on their property, they would like to see more! By taking action on their property and planting local plant species, pollinators will be welcome and will continue to support "an environment that takes care of reproducing itself and doesn't rely on human input", said Alan.

These insects and animals play a critical role in natural ecosystems and in human food production. For example, butterfly species are beautiful, but they also provide an incredible service to the planet. As pollinators, they move pollen from one plant to another, which allows the plant to become fertilized. Pollinators fertilize fruit-producing plants like blueberries, strawberries and pumpkins.

Why Participate in the Natural Edge?

What was Alan and Joyce’s experience with the Natural Edge Program and staff? “Our contacts have been very professional, proactive, and flexible. The staff are excellent communicators and clearly know their science and understand how to apply it. Since we did not have the expertise to do the job, we couldn’t have done it without the Natural Edge Program – it’s a great program!”

About Watersheds Canada

Watersheds Canada is a non-profit organization committed to providing programs across the county that work to engage and help shoreline property owners, lake associations, and community groups enhance and protect the health of lakes, rivers, and shorelines. Despite their big name, Watersheds Canada is a very small charity based in Perth, Ontario that raises every dollar each year from donations, grants, and foundation support as they do not receive any yearly support from government funding. What has always set Watersheds Canada apart is their dedication to the local communities: by taking the time to listen to the communities’ local needs, programming is always specific, impactful, and as efficient as possible.

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Blog

Meet Your Butterfly Neighbours

MARCH 12, 2020 BY MONICA SEIDEL

[LEAVE A COMMENT](#)

By Monica Seidel

Did you know that there are over 300 butterfly species in Canada, with [150 in Ontario alone](#)? While most people are familiar with the iconic monarch and swallowtail butterflies, there are many other species fluttering around that would love to meet you.

Great spangled fritillary

You may have seen this butterfly on a large native plant, like milkweed or spotted Joe-Pye weed. Great spangled fritillaries are found from British Columbia to Nova Scotia, living in marshes, damp meadows, clearings and sometimes along roadsides. They are very active and have wingspans up to 88 millimetres wide! Caterpillars crawl under leaves to hibernate soon after hatching over the fall and awake in the spring to feed on violets. Since fritillary species are very similar to each other, they must rely on pheromones and smell to find a mate of their own species.



Question mark

This is the largest butterfly in the angelwing family and has a wingspan of 45 to 68 millimetres. They are easily recognized by their distinctive wing shape, brown-orange colour and silver question mark shape found on their underside. They can be found in woodlands or urban areas, looking for animal droppings or sap from trees and rotting fruit to eat. This butterfly is thought to migrate to the U.S. for the winter and breed in Canada during the summer, though their migration is not well known.



White admiral

Adult white admirals are usually seen in June and July in Canada in upland hardwood forests, clearings and barnyards, as they are attracted to the strong smell and moisture in

poop! White admirals drink nectar from flowers and sap from rotting plants and have a wingspan of 50 to 80 millimetres. The caterpillars feed on willow, aspen and poplar, and other subspecies feed on birch, cherry and oak trees.



More than meets the eye

Butterflies are beautiful, but they also provide an incredible service to the planet. As pollinators, they move pollen from one plant to another, which allows the plant to become fertilized. Pollinators fertilize fruit-producing plants like blueberries, strawberries and pumpkins.

Threats

[Butterflies' critical food sources and habitat are impacted by heavy herbicide and pesticide use](#). Caterpillars often feed on one species of plant, which may be considered a "pest" or an unattractive species that people then mow or pull.

Another threat to butterflies, as with many wildlife species, is habitat loss and fragmentation. As human development replaces natural areas, butterflies are forced to ditches and roadsides where lack of appropriate habitat threatens the viability of caterpillars, and adults are often struck by oncoming traffic. Since butterflies migrate far distances, having suitable habitat across their entire range is not always easy.

How can I help?

You can help butterflies by providing water for them to drink from and bathe in. Natural areas with uncut grass, thistles and milkweed provide food and habitat. Leaf litter and tree debris on your property can provide a hibernation site for caterpillars. You can also plant a butterfly garden that features gorgeous native trees, shrubs and wildflowers.

Make sure to report your sightings to a database like [eButterfly](#), [Journey North](#) or [iNaturalist](#). By doing so, you will contribute to conservation research, meet other butterfly enthusiasts and grow your knowledge of local species.

This article was originally submitted as a [guest blog contribution](#) to the Nature Conservancy of Canada's Landlines blog.

Blog

The Many Health Benefits of Nature

APRIL 28, 2017 BY JORDEN KEELEY

2 COMMENTS

Written by: Chl e Lajoie, 2017

Spring is here! That means that it's time to start spending more of your days outdoors. Have you ever noticed how you feel better, both mentally and physically, when you spend some time in nature? There's a reason for that: there are many health benefits related to being outside.



Vitamin D

Vitamin D is an essential vitamin that your body requires to function properly; without it, you're at risk of muscle weakness, increased blood pressure, cardiovascular disease, autoimmune disorders, and even cancer. Vitamin D is unique because its main natural source is the sun. In order to get your daily dose of vitamin D, it is recommended to get 10-30 mins of sun exposure. Spending this short amount of time in the sun is well worth it!

Mental Health

Being outdoors has a number of positive effects on your mental health. It aids in lowering depression, reducing stress, and increasing your focus.

With current increases in depression and anxiety related illnesses, studies show that simply walking outside in nature can reduce stress and increase positivity which, in turn, reduces feelings of depression. Vitamin D, which we know comes from the sun, has been linked to depression levels; low vitamin D levels = a higher chance of depression. So get outside on your lunch break to give yourself a mental boost for the afternoon.

Eye Health

Myopia, more commonly known as nearsightedness, is a refractive error of the eye which causes one to have trouble seeing objects in the distance. It's marked by having difficulty seeing road signs or reading from a chalkboard; however, reading objects up close, such as a computer screen or book, is perfectly clear. Doctors feel it is partly the result of increased computer and TV time and according to a study by the National Eye Institute, myopia has increased from 25% to 41.6% between 1971 and 2004.

Being outside gives your eyes a rest from the strain of looking at a computer or watching television, so remember to take breaks at work and head outside to help keep your eyes healthy.



Air Quality – Clean Air

After being stuck inside all day, there's nothing better than a breath of fresh air! It seems to give you that extra boost of energy just when you need it, and there's a reason for that. Simply put, there is a higher concentration of pollutants present in indoor air compared to outdoor air, largely due to poor ventilation.

Outdoor air contains fewer pollutants since gases and particulate matter are diluted due to the larger area they have to spread out. In addition, trees, shrubs and other vegetation provide clean air through absorption of gases and deposition of particulates onto leaves. Air pollutants such as gases (ozone, and oxides of both nitrogen and sulfur) and particulate matter can have negative effects on our health.

They can affect our respiratory systems by causing asthma, bronchitis, and

emphysema. Therefore, it's best to spend as much time as you can outside to reduce the amount of pollutants you breathe in.

Exercise

It's common knowledge that eating healthy plus exercising regularly improves our overall health. A great way to accomplish this is by getting outdoors. It's easier to exercise when you step outside. Whether it's walking, hiking, kayaking, biking, or swimming you are exerting some form of energy. Furthermore, a study published in 2013 in *Extreme Physiology and Medicine* concluded that exercising outdoors is more effective than exercising indoors as you will increase your physical activity levels without realizing the amount of energy exerted. Exercising outdoors involves terrain challenges which you don't perceive to be as hard and tiring as when you increase the resistance or speed on a cardio machine.

So take the time to get out and enjoy nature with all the benefits it has to offer!!

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Blog

Cities In Bloom

FEBRUARY 28, 2017 BY JORDEN KEELEY

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Written by: Jorden Keeley, 2017

Due to the nature of our work here at Watersheds Canada, we are constantly surrounded by an abundance of plants, fish, and wildlife. Admittedly, often times we take our surroundings for granted. Visiting city centres often helps us to appreciate our unique work environment, by allowing us to recognize the contrast that urban development has created. Moving from a rural environment to an urban one forces you to notice whatever tiny patches and parcels of green you can find. The tiny leaves creeping through cracks that began as weeds, are now welcome signs of resilience in an otherwise concrete environment.

THE IMPORTANCE OF URBAN FLORA

The beneficial nature and importance of spontaneous urban flora often goes unrecognized and the presence of such plant-life in an urban setting is often interpreted “as a visible manifestation of dereliction and neglect” (Iuliana, 2011). This is due to the notion that the existence of vegetation in these urban areas is invasive and competition for a sterile urban aesthetic. In proceeding with urban growth, innovation, and the pursuit of a clean urban aesthetic, native ecology often gradually disappears. Humans force vegetation to adapt to new perimeters by depleting and confining it. As a result, plant organisms can be seen twisting and sprouting out from between the cracks of concrete sidewalks, at the base of telephone poles, amidst foreign plant species in small garden plots, and numerous other locales around the city. While these forms of vegetation are seen as unwanted weeds, they are, more truthfully, a remarkable display of ecological perseverance. According to botanist Peter Del Tredici (2014), for many, there is an “assumption that we can somehow bring back past ecosystems by removing these invasive species and replanting native species”. Issues arise from the recognition that the urban environment has changed the natural environment through the “interacting forces of urbanization, globalization, and climate change” in such a way that these invasive bouts of flora are now closer to being considered the “native species” in this newly created ecosystem, than those proposed to be reintroduced.

INTO THE WILD

In examining the avenues that society is striving towards in terms of expansion, growth, and maintenance of urban ecosystems, there seems to be some conflict. The ever-present push for innovation and expansion in urban centres often contrasts with a continuously developing sense of visceral duty felt towards the conservation and regeneration of a natural, native ecosystem within these urban spaces.

These efforts in environmental restoration draw connections from the societal construct of nature as the other, an idea which often sees urban and natural landscapes as being at odds with one another when forced to exist in the same environment.

Where urbanization takes away from the growth of native species, the vegetation that is able to overcome these immense environmental changes is frequently observed adjusting in the most peculiar places and ways. Often, even the most manicured of sidewalk stones is not immune to the survivalist flora of the city.

When we leave city centres, to camp, hike, or simply to be in nature, we see this place that we visit as separate from urban environments. The mythical wilderness—the great and vast outdoors—is a place seen by many as an entity not only separate from the city, but also separate from one’s self. It is seen as something that we can connect with and disconnect with on a dime, rather than something inherently connected to our existence and survival. The social construct of wilderness holds with it the divide we place between ourselves and the natural world. However, in the realization that one will not, and simply cannot exist without the other, and accepting that the manipulation of an ecosystem will never be idealized or fully controlled, this divide begins to close. The reality is that “an unpredictable future belongs to the best adapted” (Del Tredici, 2014) and the earth’s flora has had millions of years to strengthen and adapt to environments that have been subject to constant alteration. Thus, as cities and suburbs grow, plant life adapts to whatever environment it must survive in.

ECOSYSTEM SERVICES

Urban flora often provides a number of services to the environments that they inhabit. To fully understand their advantages and uses, Del Tredici offers three main categorizations for urban vegetation “based on their land-use history, the vegetation they support and, by extension, their maintenance requirement”. The first of these is the remnant native landscape which is essentially as close as one can get to the native ecosystem in an urban area. There are still native plant species there, however often times, they have become infiltrated by non-native species. The second category, which consists of managed, functional landscapes is what one would generally refer to as a green space. These spaces have been introduced into urban environments for recreational and aesthetic purposes and are an example of humans striving to conserve aspects of the natural environment, rather than preserving them. The last of the three classifications is that of ruderal or abandoned landscapes which consists of “post-industrial or post-residential vacant land, infrastructure edges dominated by spontaneous vegetation, either native or introduced, on relatively poor and often compacted soils” (Del Tredici, 2014). This final categorization is one within which spontaneous urban flora is found most abundantly, and this vegetation can self-sustain.

The value of urban flora can be measured in respect to both ecological and aesthetic value. It is often difficult to quantify the latter because aesthetics are subjective (Körner, 2005), and depending on the location or the situation, the opinion on spontaneous vegetation will vary. Ecological services on the other hand, are easier to evaluate. A variety of services provided by urban flora include: reduced ground and air temperatures and improved air and water quality; a food source for both humans and wildlife; erosion control; a reduction in urban noise pollution; the stabilization of stream and river banks; the absorption of toxins prevalently found in disturbed soils; “phytoremediation of contaminated soil” and carbon sequestration (Poreçbska & Ostrowska, (1999). Evidently, spontaneous urban flora provides numerous positive aspects to the surrounding environment with little to no upkeep. Essentially, the vegetation is offering sustainability and combating the pollution that urban landscapes emit into the air, water, and soil, while creating a powerful hybrid between urban and ecological environments.

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