

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!



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.

FILED UNDER: BLOG

Submit a Comment

Your Comment:				
				/
I'm not a robot				
	reCAPTCHA Privacy - Terms			
Full Name:				
Email Address:				
	S	UBMIT		





Q Search

Our Programs

About Us

What's New

Blog

Gift Catalogue

Contact Us

DONATE

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.



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.

FILED UNDER: BLOG

Submit a Comment



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.



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.

FILED UNDER: BLOG

Submit a Comment



Q Search

Our Programs

About Us

What's New

Blog

Gift Catalogue

Contact Us

DONATE

Blog

Creating a Resilient Shoreline: Keeping a natural shoreline that benefits your family and local wildlife

NOVEMBER 26, 2021 BY MONICA SEIDEL

LEAVE A COMMENT

by Monica Seidel, Communications and Fundraising Coordinator, Watersheds Canada

This past summer, you might have enjoyed the company of a northern map turtle, green frog, calico pennant dragonfly, or Great Blue Heron along the shores of Georgian Bay. Like you probably did, these charismatic and iconic species spent a large part of their summer near the shoreline. In fact, these species depend on the shoreline and riparian zone for their very survival. This zone includes the first 30-metres of land around a lake, river, or bay and is often seen as a ribbon of life because it supports 70% of land-based wildlife and 90% of aquatic species at some point in their lifetime (Kipp & Callaway, 2003). Wildlife will use this area for food, water, shelter, breeding, and nesting.



Wild Bergamot (Monarda fistulosa) is a perennial wildflower that blooms a beautiful pink/lavender flower between July and September. Photo: Monica Seidel.

In addition to supporting wildlife populations, shorelines are important to Canadians – 53% of surveyed Canadians said natural shorelines was an element that affected their personal enjoyment of being by the lake (Love Your Lake, 2020). Shorelines provide people with important cultural, recreational, and economic opportunities and can be fundamental in shaping our connection and relationship with freshwater and nature from an early age. Ontario is home to more than 250,000 lakes which means many of us have (or know someone who has!) a waterfront property that we can visit and enjoy.

Increasingly though, these important areas and the wildlife that live there are under threat. Over 55% of Canada's

(Cooke, et al., 2021), with the Eastern Georgian Bay sub-watershed being scored as "very high" for various threat indicators including pollution, habitat fragmentation, invasive species, and overuse of water (WWF-Canada, 2020). Facing increasing pressures from development and the changing climate, it is important to look at nature-based solutions to protect our freshwater areas.

Planting on-land native vegetation

The best way to create wildlife habitat and protect your shoreline from erosion is to start or enhance a native plant buffer. By planting a variety of native trees, shrubs, and wildflowers, your shoreline will benefit from different root structures that work to hold your shoreline together.

When choosing suitable plants for your shoreline, it is important to consider your site conditions (sunlight, soil, moisture), personal preferences (plant type and height), and goals of planting. If protecting waterfront views is important to you, you will want to plant low growing species. Or, if your main priority is attracting wildlife and pollinator species to your property, you may want to plant a variety of flowering





This property was re-naturalized in 2018 using a variety of native plants. The photo on the right shows the transformation as of 2020.

and fruiting shrubs and wildflowers. By choosing many plants that bloom and fruit throughout the year, you will increasingly help local wildlife. Some examples include:

- Wildflowers: Blue Lupine (blooms in spring), Wild Columbine (spring), Wild Bergamot (summer), Common Milkweed (summer), New England Aster (late summer/fall)
- Shrubs: Allegheny Serviceberry (spring/summer), Shrubby Cinquefoil (summer), Black Elderberry (late August), Smooth Arrowwood (fall), Winterberry Holly (winter), Red Osier Dogwood (winter)

A great free tool you can use to pick native plants best suited for your property is the Native Plant Database. This database selects plants based on Canada's hardiness zones; much of Georgian Bay is located in zone 5b. Once you decide what you want to plant on your property, it is important to consider the size of your buffer. One study found that a 30-metre buffer removed more than 85% of all studied pollutants including suspended sediment, nutrients, and pesticides (Zhang, et al., 2010)!

Compared to turf grass, deep rooted plants like silver maple, black chokeberry, and nannyberry have extensive root systems, making them valuable for filtering runoff and stabilizing loose soils that may be vulnerable to erosion, ice push, and boat wakes. Any sized buffer is better than no buffer at all! Remember that your buffer can be completely customized based on your preferences and budget.

Protecting and enhancing in- and near-water habitat

Another critical component of a resilient shoreline is the presence of different types of habitat features which provide shade and protection for fish, turtles, and macroinvertebrates. Start enhancing in- and near-water habitat this fall by doing...nothing! Fallen branches, leaves, and downed trees in the water and along the shoreline act as a valuable land-water interface for species like northern map turtle and Great Blue Heron and provide protection for fish and frogs. You likely already have some of these features on your property and they simply need to be left alone if it is safe for you to do so.



Fragrant White Water Lily (Nymphaea odorata) is an example of a floating aquatic plant as it has most or all of its leaves floating freely on the water's surface. Photo:

Monica Seidel.

to help you protect Georgian Bay for years to come.

As for aquatic vegetation, you may have seen these plants and not thought about their many amazing benefits – aside from being beautiful! Aquatic vegetation absorbs wave energy, protects water quality, produces oxygen, takes up nutrients, stabilizes shorelines and bottom sediments, and protects against invasive species and algae competition. They keep busy! In order to experience these full benefits on your property, you are best to manually clear a small path through any existing aquatic vegetation so you can get to deeper waters. You then leave the rest untouched.

Additional resources

If you are looking for more information about taking local action, please visit <u>watersheds.ca/resources</u> to access free fish habitat enhancement guides, plant care guides, and self-assessment tools

About Watersheds Canada

Watersheds Canada is a federally incorporated non-profit organization and registered Canadian charity (863555223RR0001) that is committed to building and sharing education and stewardship programs in communities across the country. Since 2002, these programs have engaged and helped youth, property owners, community groups, and organizations enhance and protect the health of their lakes, rivers, and shorelines.

References

Cooke, S., Lapointe, L., and J. Smol. (2021). Canada is failing its freshwater fish populations. *Globe and Mail*, 5 March. Available at: https://www.theglobeandmail.com/canada/article-canada-is-failing-its-freshwater-fish-populations/

Elias, J. and M. Meyer. (2003). Comparisons of undeveloped and developed shorelands, northern Wisconsin, and recommendations for restoration. *Wetlands*. 23(4): 800–816.

Fathom6 Research. (2013). Freshwater Insights Canada 2013. A National Survey of Canadian Attitudes On Fresh Water – High Level Findings.

Kipp, S. and C. Callaway. (2003). On the Living Edge: Your Handbook for Waterfront Living. Rideau Valley Conservation Authority. Love Your Lake. (2020). Love Your Lake 2013-2019 Summary Report. *Watersheds Canada*. Available at: https://watersheds.ca/ourwork/love-your-lake/

WWF-Canada. (2020). Great Lakes Basin Watershed Report. *World Wildlife Fund Canada*. Available at: https://watershedreports.wwf.ca

Zhang, X., Liu, X., Zhang, M., Dahlgren, R.A. and M. Eitzel. (2010). A Review of Vegetated Buffers and a Meta-analysis of Their Mitigation Efficacy in Reducing Nonpoint Source Pollution. *J. Environ. Qual.*, 39: 76-84.

**

Article originally posted in the fall 2021 Georgian Bay Forever newsletter.





Our Programs

About Us

What's New

Blog

Gift Catalogue

Contact Us

DONATE

Blog

Know, and love, your lake!

NOVEMBER 2, 2021 BY MONICA SEIDEL

LEAVE A COMMENT

by Mario Garavito

In its simple definition, a lake is a body of water that is surrounded by land. A lake can be found in every continent around the world, varying greatly in size and in depth. It could be small enough to fit in your backyard – like a pond – or so big that it is known as sea – the Caspian Sea is the world's largest inland lake, measuring over 371,000 km² in size!

Canada is exceptionally fortunate when it comes to lakes. According to different studies, our country is home to the largest number of lakes in the world, with about 7.6% of Canada's nearly 10 million km² being covered by freshwater. Therefore, despite an apparent abundance, the freshwater resource must be managed carefully. We have a responsibility of protecting these important bodies of water!



Lake-side adventures (photo: Mario Garavito).

Why are lakes important?

Lakes are ecosystems: areas where biological energy flows through a food chain that is used by many different types of organisms like birds, mammals, plants, and insects. In other words, a lake is a community where living organisms live and interact. Its health is vital for maintaining the equilibrium, or balance, of the whole system.

Did you know: Some scientists believe the first living organisms on Earth developed in lakes?

Likewise, lakes are important in preserving and maintaining wildlife populations. These freshwater areas serve as migration stops and breeding grounds for many birds and as refuges for a wide variety of other animals. For people, lakes are valuable resources in a variety of ways. For example:

- Farmers use lake water to irrigate crops;
- Lakes supply many communities with water; and,
- Because they are often very beautiful, lakes are popular recreation and vacation spots, and, for some fortunate ones, their permanent homes.

Is my lake healthy?

We are completely sure that if you are reading this article, you care about Canada's lakes. Because of that, you probably wonder if the lake where you live or which you constantly visit is in good health. The answer is not as simple, as not all lakes are alike, but there are some common aspects that can help to make a first evaluation:

· Healthy characteristics:

- Life! If you see fish and plants, it is a good sign;
- Turbidity: the less, the better;
- Wildlife: have you seen deer or other animals drinking water from the lake?
- Water circulation: allows oxygen to be spread throughout the lake and is an essential part of keeping the lake alive.



Pied-billed Grebe with baby (photo: Simon Lunn).

UNhealthy aspects:

• Eutrophication: when a lake gets too many nutrients, it causes blue-green algae growth;

- Blue-green algae (cyanobacteria): It stays on the surface of the water and forms a sort of mat. When the conditions are just right, the algae multiply quickly. This is called an algal bloom and is harmful to lakes, animals, plants, and people; and
- Invasive species: can change the natural habitat of the lake and are known as biological pollutants when this happens.



Algae bloom (photo: Barbara King).

What can I do for my lake?

There are many actions that you can take to protect and take care of your lake. At Watersheds Canada, we have been working all over the country alongside local community groups and individuals with the mission to protect and restore freshwater. One of them is **Love Your Lake**, a shoreline evaluation and stewardship program that provides individuals with a property specific report outlining voluntary actions that can improve the health of your lake and shoreline property.

The Love Your Lake Program has successfully assessed more than 150 lakes across Canada which includes almost 40,000 shoreline properties. You can learn more about the Program at loveyourlake.ca

Also, we would love to know which is your favourite lake in Canada and what you are doing to protect it. We invite you to write it in the comments and share this article with some friends or family that **love the lakes as much as you**. You can also fill in this short survey to let us know what you love about your lake: loveyourlake.ca/survey

FIL	ED	UN	DER	: BL	.OG

Submit a Comment



What, When, and How Much to Prune

OCTOBER 19, 2020 BY MONICA SEIDEL LEAVE A COMMENT

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

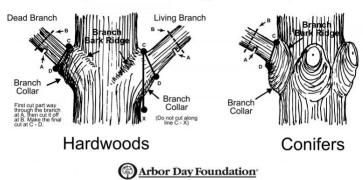
Pruning can cause stress to trees and shrubs so it should only take place while the plant is in dormancy. This happens in the late fall and early winter. Leaf loss in the fall is good indicator that a plant has gone dormant. If you want to prune a shrub that flowers, it is best to prune in the early 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 in 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.

FILED UNDER: BLOG

Submit a Comment



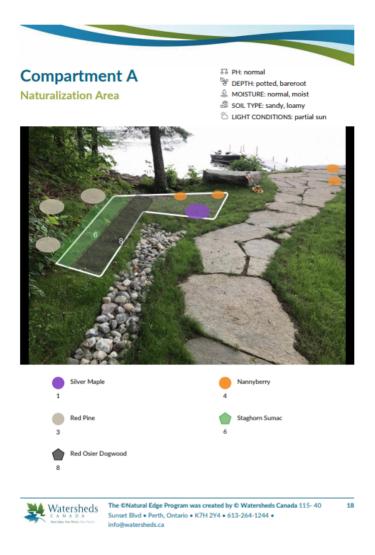
Pollinator Champion Feature - Alan and Joyce

JULY 23, 2020 BY MONICA SEIDEL LEAVE A COMMENT

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.



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.

Stay connected with us on social media! Facebook Twitter Instagram YouTube

FILED UNDER: BLOG	
ILLD ONDLIK. DLOG	

Submit a Comment

Your Comment:			
			li
I'm not a robot			
	reCAPTCHA Privacy - Terms		

Full Name:



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

<u>Butterflies' critical food sources and habitat are impacted by heavy herbicide and pesticide use.</u> 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.



Q Search

Our Programs

About Us

What's New

Blog

Gift Catalogue

Contact Us

DONATE

Blog

"Natural Is Gorgeous!": Jane Discovers the Benefits of the Natural Edge

OCTOBER 8, 2019 BY MONICA SEIDEL LEAVE A COMMENT

Because of support for generous granting programs and individual givers, Watersheds Canada is able to offer people like Jane an opportunity to naturalize her shoreline at a reduced cost. Jane was a Natural Edge participant in September 2014, and first contacted Watersheds Canada with concerns about erosion along her shoreline. As we walked the shoreline together, Jane told us about her reservations for losing her shoreline view, and about her plant preferences for her 20.5 m of shoreline. Together we picked native species like red osier dogwood, gray dogwood, silky dogwood, highbush cranberry, and bush honeysuckle to plant on her property. Since initially participating in 2014, Jane has had Watersheds Canada staff come out to her property to help re-plant trees that were lost to erosion and animals, and also for help identifying native and non-native species growing on her property.



Jane's shoreline in September 2014 before participating in the Natural Edge program.

"I could see some erosion happening so I wanted to prevent that. I also wanted to keep the geese from coming up so frequently on my property, so participating in the Natural Edge program would help address both of those problems. It would make the shoreline beautiful with native plant species. The plants are also in between my septic system and the water, so they can take up any extra nutrients that aren't dealt with in the soil, making sure excess nutrients don't end up in the water."

Have you had any geese coming up on your property since participating in the program?

"They haven't come up through the dense foliage but they still come up around the dock. That's why this year [2019] I thought I would contact Watersheds Canada again to get more plants along the shoreline. I am fine with there being foliage along the edge of the lawn to deter the geese, and I will still be able to bring canoes down to the water and lift them over the low growing plants."



Jane's naturalized shoreline in September 2019.

Do you have other recommendations for other property owners who are thinking about naturalizing their shoreline?

"Well, I was apprehensive at the beginning because I didn't want to lose any of the water view – I wanted the 'walk right onto the beach' effect for my property. Now when I sit on the dock, I really enjoy the look of the natural plants rather than grass coming right to the water's edge. Natural is gorgeous! I get the view of the water from the porch and the dock but I don't need it for all along the shoreline. An unforeseen bonus is the return of the Monarch and other butterflies. There must be some Milkweed sheltering among the Dogwoods."

What was your experience like with Watersheds Canada and their staff?

"Everybody was great. The staff have been out a few times to plant and identify plants for me."

Is there anything you'd like to tell someone who is considering having the program done on their property?

"Well I don't know why anyone wouldn't follow Watersheds Canada's suggestions because it adds to the overall natural environment – there's really no downside."

Shorelines are one the richest environments on earth, but they are also among the most threatened. Habitat loss and degradation, water quality impairments, and increasing pressures from shoreline development can deteriorate our lakes and rivers, making them a priority for environmental stewardship and restoration. The Natural Edge program offers you will a free site visit to give you advice and voluntary recommendations to improve the health of your shoreline property. Contact us to learn more and book your site visit!



The Many Health Benefits of Nature

APRIL 28, 2017 BY JORDEN KEELEY 2 COMMENTS

Written by: Chlöe 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!!

Sources

https://www.allaboutvision.com/conditions/myopia.htm

https://www.businessinsider.com/scientific-benefits-of-nature-outdoors-2016-4/#5-better-vision-5
https://extremephysiolmed.biomedcentral.com/articles/10.1186/2046-7648-2-3
https://www.health.com/mind-body/health-benefits-of-nature
https://www.livestrong.com/article/185502-outdoor-air-vs-indoor-air/
https://www.psychiatryadvisor.com/mood-disorders/nature-cognitive-anxiety-depression-mood/article/448018/
https://thetrek.co/scientifically-supported-reasons-get-outside/
https://universityhealthnews.com/daily/depression/10-vitamin-d-deficiency-symptoms-that-you-can-identify-yourself/
https://www.uofmhealth.org/news/archive/201409/walking-depression-and-beating-stress-outdoors-nature-group
FILED UNDER: BLOG
Roy September 27, 2017 3:19 am
amazing post with great info
google
Reply
Junayedseo August 1, 2017 5:52 am
Nice information, valuable and excellent design, as share good stuff with good ideas and concepts, lots of great information
and inspiration, both of which I need, thanks to offer such a helpful information here
and inspiration, both of winer theed, thanks to oner such a helpful information here

Submit a Comment