

NATURE DISCOVERY LEARNING BOOKLET

# CONNECTING WITH NATURE



Watersheds  
CANADA



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Watersheds Canada is a federally incorporated non-profit organization and registered Canadian charity (863555223RR0001) committed to providing education and stewardship programs to communities and individuals across the country to enhance and protect the health of their lakes, rivers, and shorelines.

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# GETTING READY TO EXPLORE NATURE



We are so excited for you to explore your local nature as you learn about different local species and how to help your local ecosystems!

This booklet will give you tips to safely explore nature as you learn about different animals and plants that are found in and around Haliburton and Peterborough. You will discover what a watershed and the riparian zone are, and see ways you can help nature, all with some fun activities along the way!

If you are interested in learning more about  
protecting your freshwater, please visit:

[watersheds.ca](http://watersheds.ca)



# STAYING SAFE



**Here are some things to keep in mind when exploring outside:**

- Stay home if you feel sick, if you have been in contact with anyone who has tested positive, or if you are under self-quarantine.
  - Practice physical distancing and best hygiene practices when you see other people in nature.
  - Bring your own mask, hat, snacks, water, sunscreen, and bug spray. Make sure to bring back any garbage you have so you can properly get rid of it at home.
  - Tell someone where you are going and when you will be back.
  - Watch wildlife from a safe distance and do not try to handle them.
  - Do not pick any wildflowers or plants - please leave nature for everyone to enjoy.
  - Wear long sleeves and long pants if walking in a wooded area.
- Learn more about tick safety: <https://www.ontarioparks.com/parksblog/how-to-protect-yourself-from-ticks/>



# WHAT IS IN MY KIT?

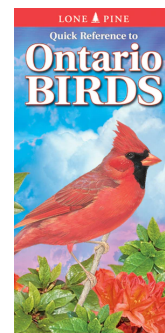
## Seed Kit & Garden Guide

- Each native wildflower seed kit comes with seeds and compostable pots.
- In the guide, you will learn about wildflower pollinator gardens and why they are important, how to plant your new seeds, and how to take care of them as they grow.



## Bird Identification Guide

- Learn about commonly found bird species and some identification tips based on their size, where they live (their habitat), and what sounds they make.



## Binoculars

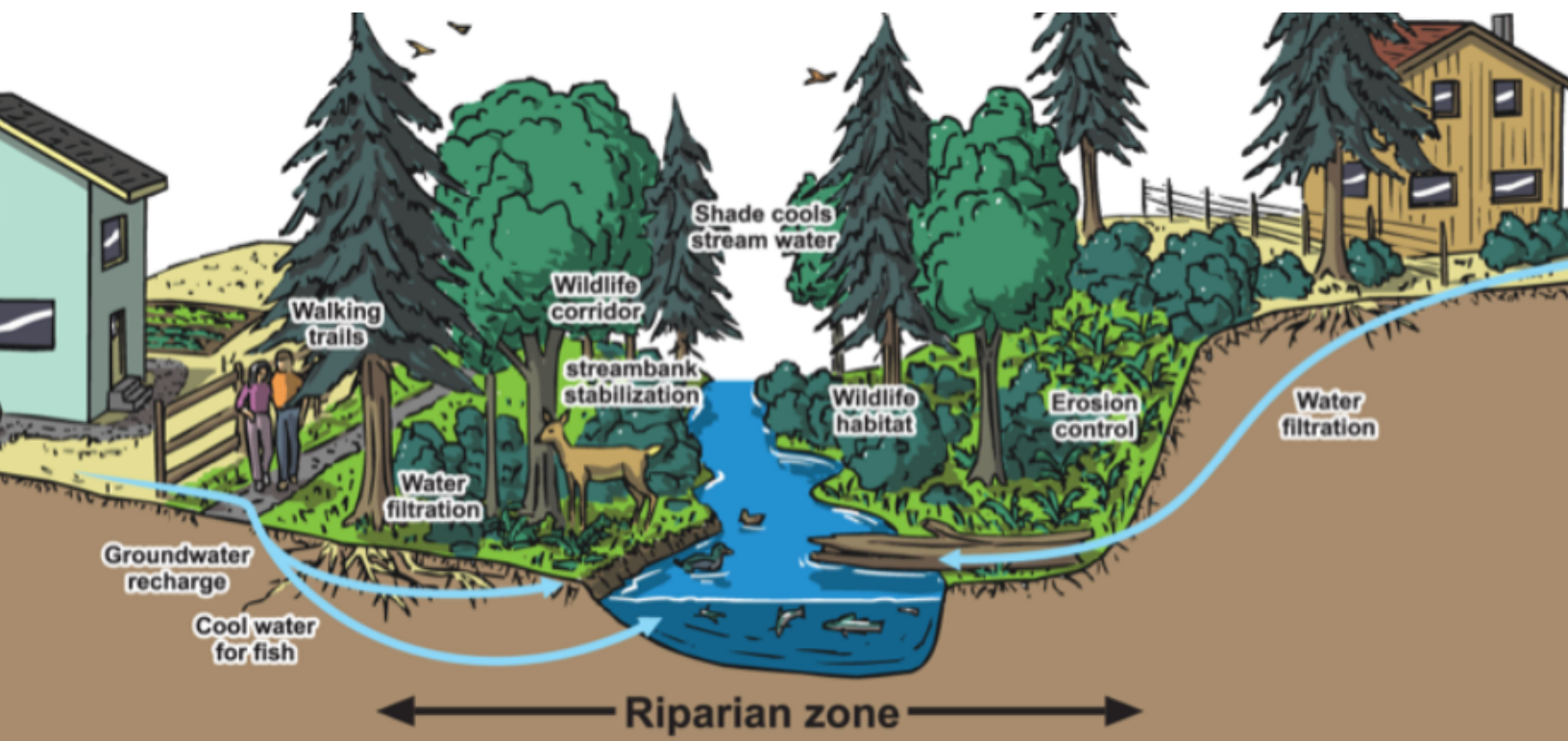
- What do the numbers on the binoculars mean? The first number tells you how much closer you will see things, and the second number tells you how wide the lens are in millimetres.
- Turn the knob to make it clearer to see.
- Use a soft cleaning cloth if you need to clean the lenses (glass).





# THE RIPARIAN ZONE

- Shoreline ecosystems, or riparian zones, are very important and valuable habitat for land-based and water-based wildlife.
- The shoreline area includes the first 30 metres of land around a lake or river. It is considered the “ribbon of life” because it supports 70% of land-based wildlife and 90% of aquatic species at some point in their lifetime.
- Native wildlife species like birds, mammals, insects, fish, reptiles, and amphibians depend on shoreline habitat for food, water, shelter, and breeding.



Source: "Riparian Areas". (2021). Cowichan Lake and River Stewardship Society, <https://www.cowichanlandtrust.ca/portfolio-items/riparian-areas/>



# WHO LIVES HERE?



**Red-winged Blackbird**



**Marsh Wren**



**American Bullfrog**



**Monarch Butterfly**



**Common Milkweed**



**White Water Lily**



**Painted Turtle**



**Dragonfly nymph**



**Northern Leopard Frog**



**Blanding's Turtle**





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# ACTIVITY #1: SKETCH IT!

*Sketch a section of shoreline along a local river or lake!  
Make sure to include the riparian zone - the area of  
plants between the water and the tree line.*





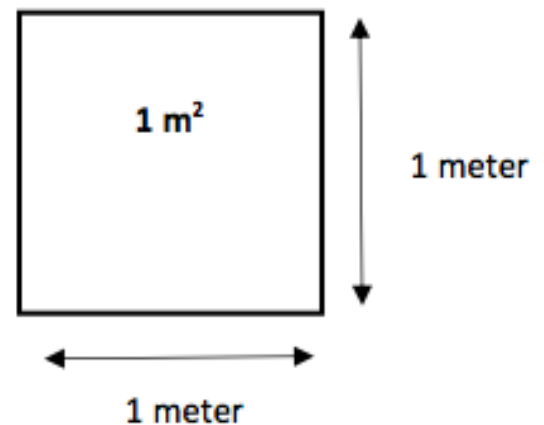
# ACTIVITY #2:

## LIFE IN A SQUARE

*In this activity, you will discover the diversity of living (biotic) species and non-living (abiotic) factors in a specific spot.*

Find an area that seems to have a lot of biodiversity present. Your area should be about 1-metre (m) square in size.

On the next page, draw a top view of the area. Draw in any plants, rocks, insects, pollution, leaves, and any other features you find.



Kneel next to one side of your spot, and look around carefully. As you draw what you find, label what you can using your identification guides.

If you do not know the name of a species, snap a picture and try figuring it online using a website like [iNaturalist](#).



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**Date:** \_\_\_\_\_ **Time:** \_\_\_\_\_

**Temperature:** \_\_\_\_\_

**Weather conditions:** \_\_\_\_\_

\_\_\_\_\_

Follow-up questions:

1. How would you describe the diversity of your spot: high or low?
2. What non-living (abiotic) factors might affect what lives in this spot?

# ACTIVITY #3:

## DO A BIO-BLITZ

A BioBlitz is a volunteer-led count of the biological species found in an area. Using identification guides or Apps, you can get a "snapshot" of the species and biodiversity in your area.

What can you find in 30 minutes? An hour?

**BIRDS**

**TREES**



## DRAGONFLIES & DAMSELFLIES

## FRESHWATER INVERTEBRATES

## ANIMAL TRACKS

## WILDFLOWERS

# ACTIVITY #4:

## TALK TO THE BIRDS

*You may hear birdsong in a forest or your backyard, but have you ever tried to have a conversation with these birds?*

*Try to whistle and mimic (copy) their noises and use your binoculars to see if anyone comes to see you!*



### Red-winged Blackbird

- Males have red shoulder patch bordered in yellow (pictured)
- Have a slender, cone-shaped beak
- Habitat: near watery areas like marshes
- Close to the size of an American Robin
- Song sounds like they're singing "conk-la-ree!"



### Northern Cardinal

- Females are pale brown with reddish tinges in the wings, tail, and crest, with a red-orange beak and black face around the beak
- Males are red all over, with a red bill and black face around the beak (pictured)
- Song: "cheer-cheer-cheer-purty-purty-purty"

## Barred Owl

- Large owl with a round head, no ear tufts, and a medium length rounded tail
- Habitat: large, mature forests, often near water
- Nest in tree cavities (holes)
- Call: "whooo-cooks-for-you"



## American Goldfinch

- In spring and early summer, males are bright yellow with black forehead and black wings with white markings (pictured)
- Habitat: fields, floodplains, roadsides, yards
- Diet: seeds
- Song: "pa-chip-chip-chip"



## Northern Flicker

- This woodpecker is a ground forager, always looking for delicious insects to eat!
- Habitat: open habitats near trees (woodlands, edges, yards, and parks)
- Song: "kleeeyer-wik-wik-wik"



**Keep practicing your bird call identification skills with these websites:**



**Merlin Bird ID**





# ACTIVITY #5: BECOME A COMMUNITY SCIENTIST

*Using the information you gathered in activities #3 and #4, consider submitting your sightings to one of the many free and open access community science programs.*

When you enter your animal or plant observations online, it can help scientists and nature groups keep track of different populations over time as they see local and regional impacts from climate change, increased human development, and pollution.

Here are just a few you can pick from:



Merlin Bird ID





# ACTIVITY #6: FOLLOW IN THEIR FOOTSTEPS

*Not seeing any wildlife? You may have just missed them!*

**Here are some tips for finding animal tracks:**

- Look for tracks in areas with wet sand and soft mud, like beaches, creek beds, trails, and puddles.
- Look in the early morning or late afternoon as the sun better illuminates shaded areas.
- Look off the trail - people's shoe prints will make it hard for you to find animal tracks.
- If you have never tracked an animal before, a good way to get started is to watch an animal make a track and then go look at the track right away.
- Remember that you will not always come across a track that perfectly matches what is shown in a guide! You will have to do some detective work to figure out which animal left the track.

*Want more practice before you go in the field? Try this Scout Life animal track quiz: <https://scoutlife.org/quizzes/6662/>*

# HOW ARE PEOPLE IMPACTING NATURE?



As shorelines become more developed, humans are changing the way shorelines have looked and the species that can live there.

Some threats to wildlife and water health include: plastic pollution, introducing non-native (invasive) species, road mortality, and habitat removal and fragmentation.

One way to help is to replant a shoreline with native plants along the edge. This buffer helps to filter and stop things like fertilizers and pesticides from entering the water. Plant roots also help keep soil together in heavy rainstorms which prevents erosion.





# HOW CAN I HELP?

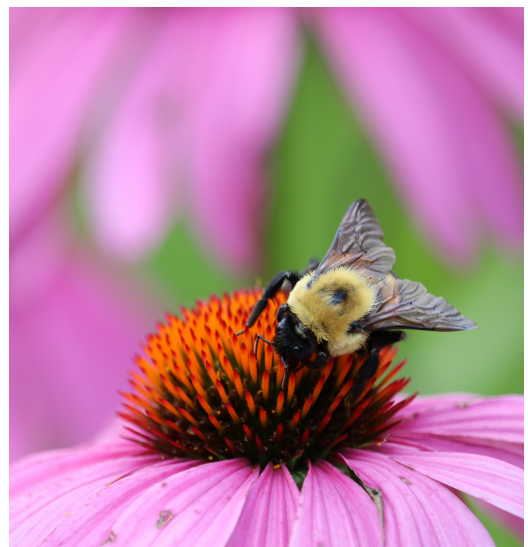
- ☐ Take photos and observations of different animals and plants you see in nature and submit them to an online database like iNaturalist, eBird, MonarchWatch, or Water Rangers.

- ☐ Do a shoreline cleanup by yourself or with your family. Snap a photo and let an organization like the Great Canadian Cleanup know what you found and how much garbage and plastic you cleaned up!



- ☐ Volunteer with a local nature group or join a field naturalist group to learn more about local wildlife and spend time in nature with other like-minded and passionate people.

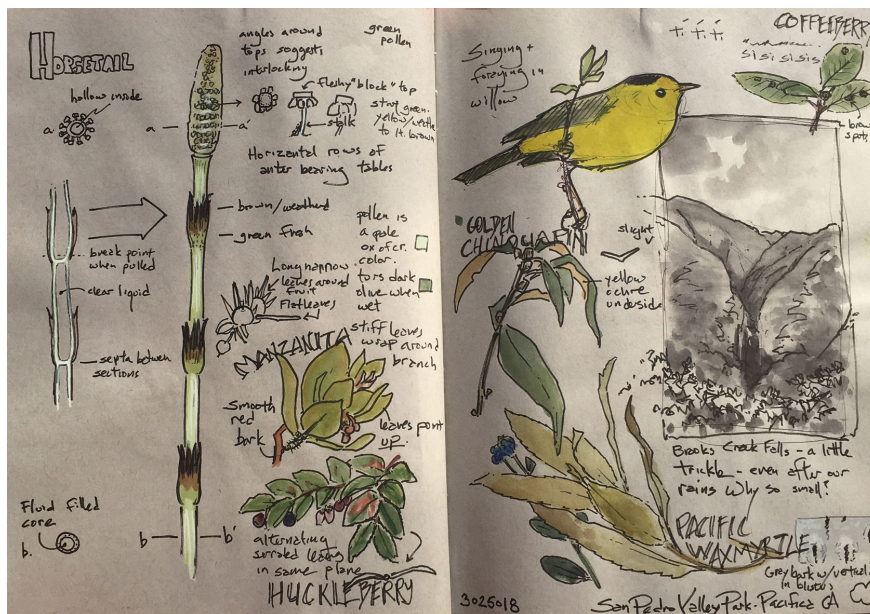
- ☐ If you have a shoreline property, consider adding native plants along the shore to provide habitat, food, and stabilization to your shore. Live in the city? Plant native wildflowers to help small mammals, birds, and pollinators. Learn more: <https://naturaledge.watersheds.ca/plant-database/>



# ACTIVITY #7:

## NATURE JOURNALLING

Nature journaling is a way for you to document and organize what you see, smell, and hear while outside. You will collect your observations, explanations, and questions using words, drawings, and numbers (data). You do not need to be an artist!



You can journal anything that is interesting to you.

Add diagrams, maps, numbers, or sketches.

Count the number of species you see, and the time, weather, and date.

Source: John Muir Laws

Interested in learning more about nature journalling?

Visit: <https://johnmuirlaws.com/>



# ACTIVITY #8:

## NATURE SEARCH

D O B V A C H O C O L Z V Q L O T R I A U E V  
 F R A R E M N O S A W F T E K H P A D Z C W Z  
 R A M J Q L P V A R E K H F W Z E Y B S L C U  
 D O U E E B O J I S S G A L K X O E D R I B A  
 E R E C O S Y S T E M S O G H J R E D E K M K  
 T E R I P R E E A C F N T R L D J W E Z A O P  
 P T U E G Y J R E F E O B I O T I C R Q Y N N  
 L A V E H T K S K E E E E F C I L P U Y T A L  
 A W P L A S T I C R R T F U G C T V T B R R A  
 M H E V I T A N S Z A G Y F Y Y K R A J P C M  
 O S H L V S R K O Z B K F R O G D S N H N H H  
 P E I N C H O S A R C H Z W A U O A I A T E Z  
 B R R E Z X Y T E N I L E R O H S B C B L S L  
 A F T H B I O D I V E R S I T Y I S T N A L P  
 V O I A N A I R A P I R Z Q A A B I O T I C Y  
 F A C B D O L G R U Z W A K L O B F G H R E W

Ecosystem

Biodiversity

Biotic

Frog

Safety

Freshwater

Nature

Shoreline

Plants

Plastic

Riparian

Monarch

Native

Abiotic

Bird





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Great Egret