



Biosphere
URBAN
Bio**kit**
HALIFAX
REGIONAL MUNICIPALITY

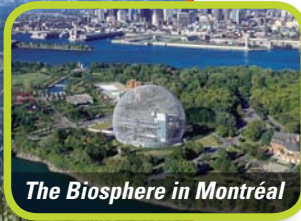
Four Seasons of Fun for the Whole Family!



A walk by the sea

Photo: © Parks Canada, Joseph Chater

URBAN ECOSYSTEMS AT YOUR DOORSTEP



The Biosphere in Montréal

Photo: © Environment Canada

Are you familiar with the animals and plants near your home? How much do you know about the biodiversity in your neighbourhood? To help you explore your surroundings, the Biosphere Environment Museum and the Halifax Regional Municipality (HRM) are pleased to present this urban activity.

Environment Canada's Biosphere encourages citizens to take action and get involved in environmental issues. In addition to presenting exhibits and special events, the Biosphere develops educational and awareness-raising products for a diverse clientele across Canada and is a recognized clearinghouse for environmental information.

The natural environment is one of the defining features of the HRM. The region has a long coastline, numerous lakes and rivers, and large forests. Citizens have indicated that protection of the natural environment is a key priority for preserving their quality of life, community identity and opportunities for outdoor recreation.

Biosphere: ec.gc.ca/biosphere
HRM: halifax.ca



Photo: © HRM

Did you know...
The bird in the middle of the HRM flag is a kingfisher, the symbol of the fishing industry. Did you notice the Belted Kingfisher on the front cover?

Reconnect with your environment...

How the BioKit Works

1. Choose a nearby park. Print the circuit specific to your chosen park (if applicable).
2. Gather up your equipment: GPS unit (optional), magnifying glass, binoculars, camera, pocket-size mirror, pencil and clipboard. Don't forget to bring the equipment you need for the park circuits.
3. Step out your front door and consider your surroundings in order to answer the questions on the following two pages.
4. If possible, walk to the park you chose in step one. Once there, continue observing the environment around you (follow along with the questions in the following sections of the BioKit).
5. Upon your return, discuss your outing with friends and family. Explore other BioKits by visiting ec.gc.ca/biotrousses-biokits.

In the electronic version of this document, available on the BioKits website, highlighted words are hyperlinks to a website.



The Urban Environment

As you step out the door and make your way to the park, check off the numbered items in the drawing as you notice them. What role do they play in your surroundings? (See the examples below.)

The HRM is home to approximately 300 000 urban dwellers. By 2020, 90% of Canada's population is expected to live in cities. All of these cities were built in the wilderness and are still surrounded by nature, though this may not always be obvious. Are your surroundings welcoming to you and to nature?



- ① **Trees, plants and flowers** = improve air quality and provide shelter for wildlife
- ② **Insects and animals** = show that our urban environment is healthy
- ③ **An urban water source** = can ensure life, health and safety
- ④ **A health clinic** = protects the well-being of people and the community
- ⑤ **Green transportation** = helps reduce greenhouse gases
- ⑥ **A neighbourhood business** = boosts the local economy and contributes to its diversity
- ⑦ **Objects connected with recycling** = show responsible consumer behaviour
- ⑧ **A community garden** = provides a local food supply and opportunities for socializing
- ⑨ **A public bench** = provides a spot to relax and connect with others
- ⑩ **A public gathering spot** = nurtures a sense of belonging
- ⑪ **An activity area for young people** = allows for healthy development
- ⑫ **A cultural location** = enriches the community
- ⑬ **An historic building** = gives the city character and attracts tourists
- ⑭ **Urban art** = creates beauty and a place for reflecting
- ⑮ **Name a local place you would take your friends to visit** = a source of community pride! _____

It's a Go!

Between your home and the park, did you observe green spaces?



Are animals able to travel from one green space to another? _____
If so, you may be standing in a wildlife corridor.

Wildlife corridors: In cities, parks, tree-lined walkways, railway tracks, golf courses, flower boxes, fountains and balcony planters can all contribute to urban wildlife corridors. These environments provide pathways to connect animals and plants with food, shelter and breeding areas.

Park visited: _____

Date: _____

Departure time: _____

Return time: _____

GPS coordinates: _____
(optional)

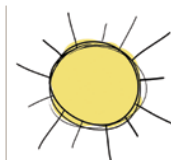
WEATHER

Temperature: _____ °C

Eco-friendly tips for urban nature explorers:

- Do not pick **plants** (including flowers, ferns, etc.) during your outing.
- Obey any signs asking you to stay on **pathways**.
- **Leave nature** the way you found it.
- Observe **wild animals** from a distance and do not feed them.
- Put your **trash** in the recycle, compost or garbage bins found in all Halifax parks and along the waterfront.

Photo: © Parks Canada



Sunny



Partly cloudy



Cloudy



Foggy



Rainy



Snowy



Windy



HRM is often rainy or foggy because it is close to the ocean. It has a maritime climate. The Atlantic Coast is far stormier than most other areas of Canada and is prone to unique weather events. In 2003, Halifax was hit by Hurricane Juan, which caused widespread destruction.



Find out more
See "Healthy Communities"
on page 35

TAKE A BREATHER!

Take a deep breath and look around you.

What is your first impression?

Talk about what you see with the people around you.



Photo: © Chantal Lepire



Prowling for Lichens

Air pollution can worsen health problems like asthma. Did you know that the type and amount of lichens growing on tree trunks can tell us about the air quality? Most lichens are sensitive to air quality and deteriorate when air pollution levels are high.

Take a look at the tree trunks around you.

Do you see any lichens? _____

Do you see different types of lichen? _____

Lichen : composed of a fungus and an alga living in symbiosis (a relationship that benefits both). Lichen forms a clump, sometimes coloured, on tree trunks and rocks. Lichen does not harm the tree or shrub it's growing on.

*Did you know...
The Osprey is
Nova Scotia's
official bird.*



CRICK, CRACK, TWEET!

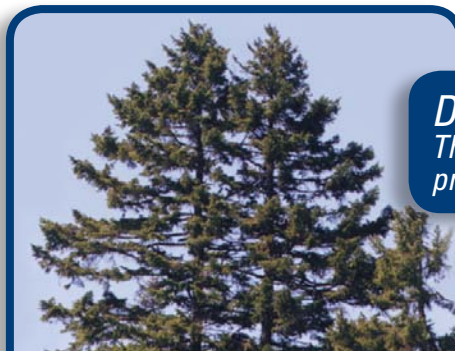
The sounds in our environment affect our well-being.

Close your eyes and listen. Write down the sounds you hear

from nature:

from human activity:

Circle the sounds you'd prefer to hear less often.



*Did you know...
The red spruce is the
provincial tree of Nova Scotia.*

Photo: © Communications Nova Scotia, Christopher Cairns

A Certain Something in the Air

Catch the Scent!

The atmosphere is an ocean of gases that we live in and breathe in all the time. Describe the odours you can smell in the air:

- Salty? Floral? Diesel? Other: _____

What direction is the wind blowing from?

What did you do to find out?

The atmosphere plays an important role in how our planet functions. It protects us from the sun's rays and regulates our climate, making our survival possible.

SEE ANY CLOUDS IN THE SKY? HOW ARE THEY SHAPED AND WHAT DOES THEIR SHAPE TELL YOU?



Cirrus: Located high in the sky, cirrus clouds sometimes indicate that rain is coming.



Cumulus: Located low in the sky, these clouds often appear in good weather. In the hot, humid days of summer, they can transform into cumulonimbus clouds.



Stratus: Usually sitting fairly low in the sky, stratus clouds often cause "grey" days and can herald storms or drizzle.



Cumulonimbus: These are large grey clouds, taller than they are wide; in summer, they are a sign of stormy weather.

Eco-friendly tips for clean air:

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- **Walk**, use your bicycle, car-pool or take a ferry or a bus.
- When you are waiting in a car, **avoid idling** the engine.
- Consult the **Air Quality Health Index** when planning your next outing.

Source: Photodisc

Urban Biodiversity



Find out more
See "Air Issues" on page 34

SHAPE GAZING

Generally speaking, the more species there are, the healthier the environment.
How many different shapes of trees can you find?



Shrub



Other

Are the trees healthy? Look at the leaves. _____
Are they spotted, insect-eaten or yellow? _____

If you examine red maples and sugar maples in the park, you may see black blotches on the leaves. These marks are caused by a fungus called tar spot. When raking affected leaves, do not add them to your compost pile, as this will harm other plants.



Signs of spring in the city

Photo: © Nova Scotia Museum of Natural History

Hide and Seek!

If you see a bird or a squirrel pass by with a twig, a string or something else (sometimes unusual) in its beak or mouth, follow it from a distance and, with a little luck, it might lead you right to its nest. Take care and remember, do not disturb the occupants!

Photo: © Parks Canada, B. Morin



A healthy ecosystem

- cleans the air and water
- produces oxygen
- traps carbon dioxide gas
- controls insects and animal pests naturally
- encourages pollination
- helps control flooding and erosion
- produces fertile soil
- plays an important role in the economy, health and food safety

These are services that the public would otherwise pay for.

The Secret Life of Trees

Take a closer look. There could be a nest hiding in that hollow tree trunk! Look closely at treetops too. See any nests made by:

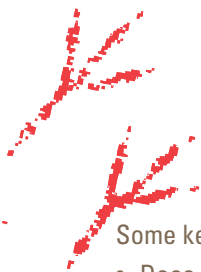
- squirrels?
- birds?
- wasps?

Or any woodpecker holes or cocoons built by insects?

Look for **animal tracks** in the snow or in the mud. Notice the different shape and arrangement of paw-prints or footprints and follow the trail.



Red squirrel



American Crow

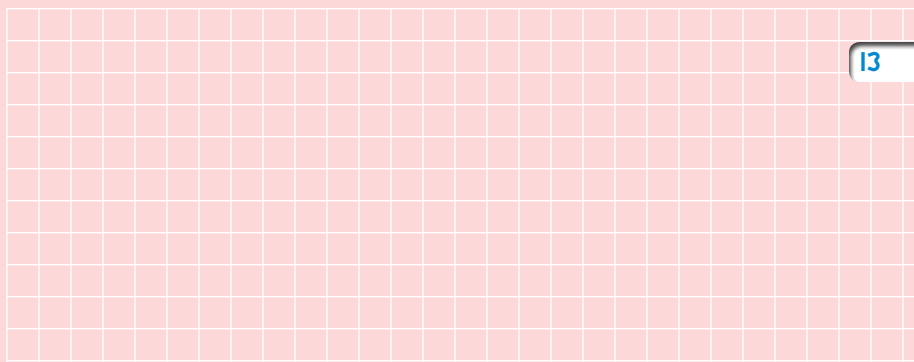
Some key things to look for:

- Does it have two feet or four?
- Are the footsteps close together (maybe indicating a smaller animal) or far apart (a bigger animal)?
- How many toes are there?
- How are they oriented?

Winter Comes and Life Goes On

Follow that trail! Check whether animals left any clues like leftover food, scratch marks, dung or tracks as they passed by trees. What can you see?

Sketch a picture of the tracks you find so you can identify them when you get back home.



Did you know that the red squirrel makes its own maple syrup? It bites the bark to get to the woody tissue and lets the sap flow. Once the water evaporates, it returns to harvest the "syrup"!

Autumn in HRM



Fall Trees

During the fall months, the leaves of deciduous trees begin to die and fall off. Not only broadleaf trees lose their foliage; the tamarack, a conifer, loses its needles in winter.

During the autumn transition, many mysteries unfold in the Acadian forests of Nova Scotia.

Begin by searching for different colours of leaves, and check off the colours you find in the boxes below.

The Maritimes are covered by Acadian forests, which contain a mix of broadleaf trees (maple, birch and aspen) and coniferous trees (pine, spruce and hemlock). Broadleaf trees are famous for the stunning fall displays they produce when their leaves turn. Enjoy the full range of vibrant colours as forests pass through the transition to winter.



Fall is the time when you can often spot abandoned nests in trees that have shed their leaves.

Can you find any?



Orange



Red



Green



Yellow



Burgundy



Brown

Fun-gus Fun:

Nova Scotia is home to thousands of different species of fungi. Autumn is a good time to find mushrooms growing on the forest floor.

Ready? You have three minutes to find as many differently shaped mushrooms as you can. But be careful not to touch them! Some mushrooms are edible, but many are poisonous.

The best places to look for fungi are on the ground, on tree trunks and on rotting wood. Damp places like ravines, fields and meadows are all worth exploring.

Photo: © Sylvain Deland



Photo: © Sylvain Deland



Photo: © Sylvain Deland



Once you find a mushroom, use your pocket mirror to observe its underside. Then draw side and bottom views of your discovery.

Side:

Bottom:

Find out more
See "Nature"
on page 34

Mammals, Reptiles and Friends!

HOW MANY DIFFERENT TYPES OF ANIMALS CAN YOU SEE?

Include pets, street animals, farm animals and wild animals:



Amphibians



Mammals



Fish

Others



Reptiles



Birds



Invertebrates



Raccoon



Find out more
See "Nature"
on page 34

Eco-friendly tips for urban biodiversity:

- Create **urban gardens**: flower beds, balcony planters and grow native species.
- When planting gardens, think about **pollinators**.
- Learn more about nature and how to identify species by participating in the **Thousand Eyes** program.

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Insects Are Animals Too!

Scientists have identified up to a million species of insects so far, but estimate that there may be as many as 30 million. Insects differ from other animals by their three pairs of legs. With or without your magnifying glass, scour the ground or search among the flowers for insects. Who knows, you might discover a new species!



Honey bee

Pollinating Insects:

These insects carry pollen from flower to flower. Bees, wasps, butterflies, beetles and flies are among these beneficial insects.

We owe them credit for over 70% of the food we harvest.

These days, pollinating insects are threatened by:

- the loss of habitat,
- the use of pesticides,
- competition with other species (often alien),
- monoculture,
- diseases and parasites,
- light pollution.

Spiders and millipedes are not insects, but they still belong to our environmental family!



Butterflies and caterpillars



Ladybugs and beetles



Bees, wasps and ants



Flies and mosquitoes



Dragonflies and damselflies

Others

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Endangered Species of HRM

Many birds observed in the HRM are migratory species, meaning that they do not live in the same place year-round. In fact, many of these birds fly thousands of kilometres to reach Canada's Maritimes, where they breed and raise young. Many are threatened by pollution, habitat loss, predation and human hunting. Sadly, many migratory birds are now threatened, endangered and even extinct as a result.



Photo: © Parks Canada, W. Lynch

The Harlequin Duck

Habitat: These birds spend the winter in marine areas along the Nova Scotia coast. Here they tend to feed in the shallow waters of the rocky coastline.

Conservation status: Populations in eastern North America have declined considerably since the late 1800s. Currently, the Harlequin Duck is listed as a species of special concern in Canada.



Photo: © Ted D'eon

The Roseate Tern

Habitat: Roseate Terns are found in late spring and summer in Canada, where they breed on a few islands off the Atlantic coast of Nova Scotia.

Conservation status: The Roseate Tern is listed as endangered in Canada, where there are an estimated 100 breeding pairs.



Photo: © Environment Canada

The Piping Plover

Habitat: Except during migration, this species lives exclusively on beaches. In Nova Scotia, Piping Plovers nest on sandy or gravel beaches above high-water levels.

Conservation status: The Piping Plover is listed as endangered in Canada. This species remains at risk from predation and human recreational activities, which disturb their beach habitat.



A LONG JOURNEY

Migration routes are largely determined by food availability, because migrating birds need to build fat reserves to travel long distances. Shorebirds that follow coastlines to wintering grounds must have stable feeding opportunities to survive their migration.

Imagine you are a bird migrating from Mexico to breed off the coast of Nova Scotia.

What are four **threats from human activities** you would have to avoid?

- 1: _____
- 2: _____
- 3: _____
- 4: _____

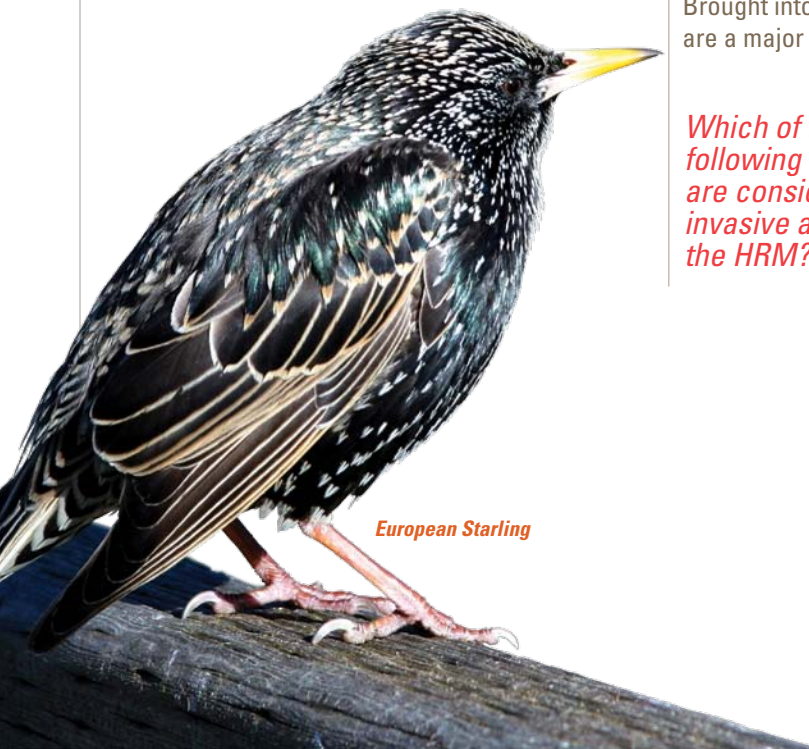
In Canada, at least 400 wild species are disappearing from the country, some more rapidly than others. To protect them, the Government of Canada passed the *Species at Risk Act* (SARA). For information on species at risk in Canada, consult the [SARA registry](#).



Find the Invader

INVASIVE ALIEN SPECIES

Brought into Canada accidentally or on purpose, these plant and animal species are a major threat to biodiversity and are very difficult to control.



European Starling

Which of the following species are considered invasive aliens in the HRM?



a) Giant hogweed



b) Yellow iris



c) Brown spruce longhorn beetle



d) Japanese knotweed

Photo: © Klaus Bolte, CFS-SCF, NRCan-RNCan



Photo: © Bob Guscott, Nova Scotia Department of Natural Resources

Did you know that...

The brown spruce longhorn beetle is a wood-boring insect native to Europe. It is also found in Siberia and Japan. It was probably transported to Halifax in shipping containers in the early 1990s. This insect has had a devastating effect on red spruce in the Point Pleasant Park and surrounding region of Halifax, resulting in the removal of more than 6000 trees to control the infestation.

Eco-friendly tip to prevent the spread of wood-boring insects:

Don't take firewood with you! Leave it at home and buy your supply locally.



Find out more
See "Urban Biodiversity Issues" on page 35



Photo: © Halifax Public Gardens

Answer:

If you guessed that all of them are invasive alien species, you were right! A) Giant hogweed and D) Japanese knotweed are very serious threats to habitat in Nova Scotia and the rest of Canada; B) the yellow iris is a common pond invader originally from Europe; and C) the brown spruce longhorn beetle represents a risk to our conifer forests and urban trees.

Going Coastal in Atlantic Canada

IF YOU ARE NEAR THE OCEAN, HEAD TO THE NEAREST ACCESSIBLE SHORELINE. BE SAFE!

Tides are the short-term changes in sea level that occur in coastal areas around the world. Tides are created by the combination of the earth's rotation and the gravitational forces of the moon and sun. The survival of all creatures living in the zone where land meets the ocean, called the intertidal zone, depends on the tides.

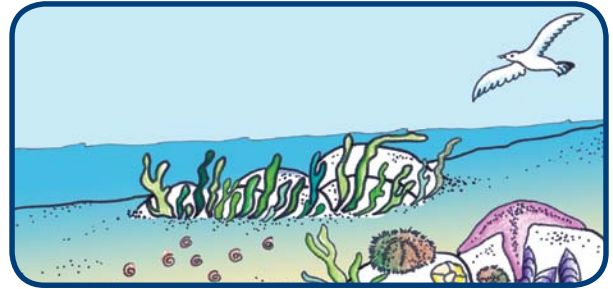
High or Low?

It is easy to tell whether a tide is high or low. If you are standing near the ocean, look around and examine the different marks left by the ocean at maximum tide. If the tide is low, you will see exposed intertidal life like mussels, crabs and seaweed brought in by large waves.

Is the tide high or low? _____

Did you know...

That the marine biodiversity of the HRM has increased significantly over the past few years? This is partly due to public involvement in programs such as the [Great Canadian Shoreline Cleanup](#). Get out there and participate! We can improve our coastal habitats even more!



At high tide, the ocean provides a protective blanket of water to shield these creatures from predators and the elements.



At low tide, the animals of the intertidal zone become exposed to both the elements and predators.

Illustrations: © Environment Canada – Artist: Yolanda Poplawska

Tips for coastal adventurers:

- Be careful, wet rocks can be slippery.
- Don't touch the wildlife.
- Watch out for rising tides.
- Never swim without supervision.

BEACHCOMBERS

Even in busy harbours like Halifax, animals can be seen living between rocks. You can find a lot more creatures on shores that are less polluted. Try checking around partially submerged rocks in the intertidal zone. **Check off any creatures you find below.**



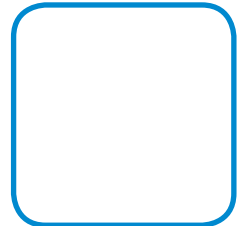
Barnacles



Photo: © Parks Canada, J. G. Béliveau
 Crabs



Photo: © Parks Canada, L. Falardeau
 Starfish



Others



Photo: © Parks Canada, J. Butterill
 Mussels



Periwinkles



Photo: © Parks Canada, E. Le Bel
 Sea urchins

Urban Landscapes

HEAD FOR THE HILLS OR CITADEL HILL!

Over time, humans have transformed the natural landscape. Look for some high ground in the park and divide what you see into groups.

Natural features:

hills, waterways, fields, forests, ocean and lakes

Structures and signs of human activity:

roads, trails, train tracks, power lines, buildings, industrial sites, forts, ships, wharves, church steeples, green roofs (totally or partially covered with vegetation)

Do you see any wildlife corridors (vegetation strips) that animals could use to move from place to place in the city?

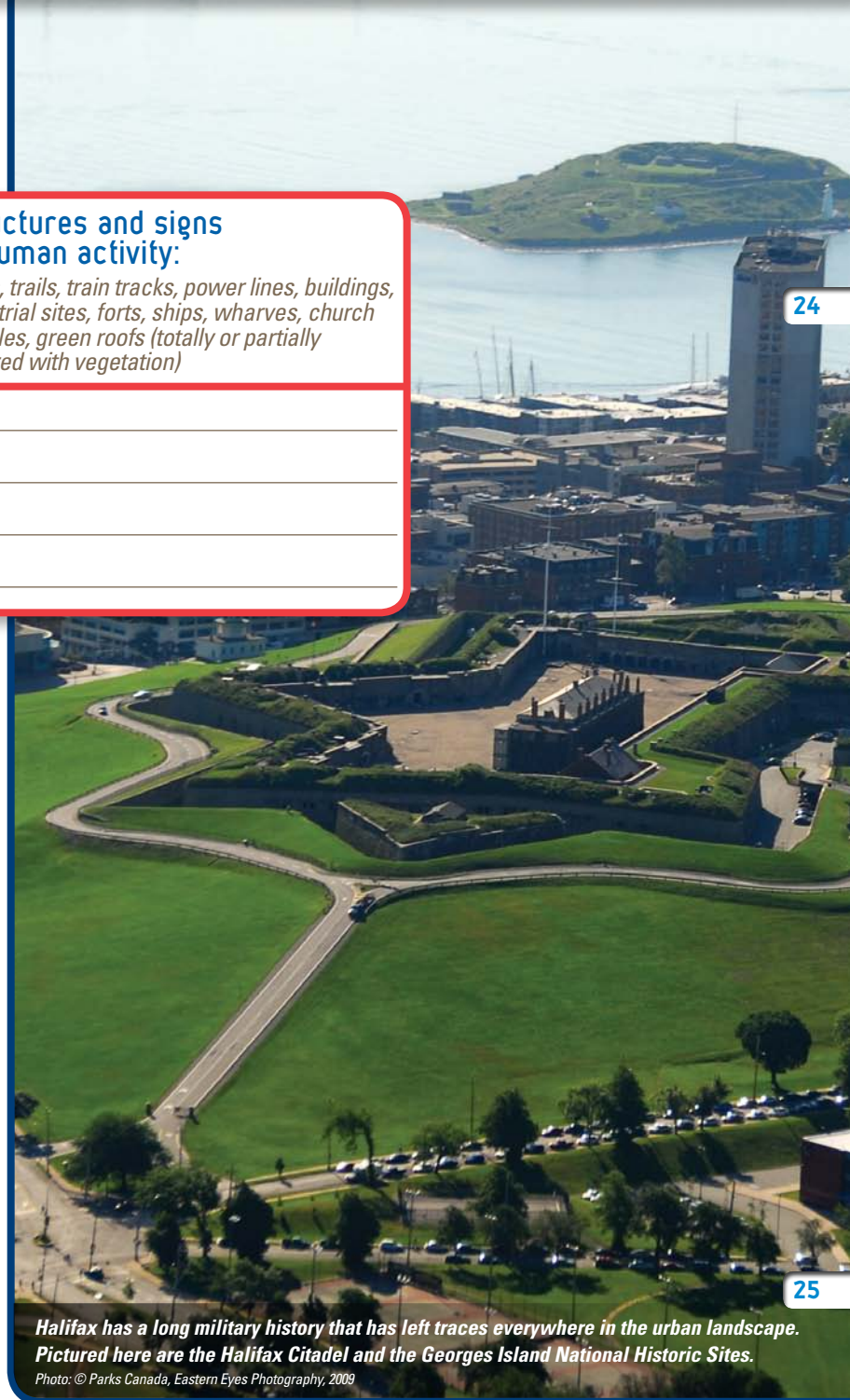
A DIFFERENT ANGLE!

Sometimes, just looking at something from a different angle can lead to surprising discoveries.

- Take out your pocket-size mirror and walk backwards. Does the landscape look any different?
- If you're the acrobatic type, walk on your hands and describe what you see.
- What is your favourite point of interest? Ask the others with you to guess.
- Imagine what the landscape around you looked like in your grandparents' day.
- What will it look like in the future?
- Imagine what this area looked like before human structures existed here.

WATER, WATER, ANYWHERE?

Life depends on water. Look around you. Do you see a waterway, pond or lake? Do you notice any new varieties of plants or animals? If you wait long enough and pay careful attention, you might get a glimpse of the more skittish species that live in the water.



Halifax has a long military history that has left traces everywhere in the urban landscape. Pictured here are the Halifax Citadel and the Georges Island National Historic Sites.

Photo: © Parks Canada, Eastern Eyes Photography, 2009



Sperm whale

Backyard Bingo!

Test your expertise in finding urban biodiversity in your backyard, in a nearby park or green space. The bingo card below shows a variety of plants, creatures and other elements found in the urban areas of the HRM. Check the corresponding box for each thing you observe. Try not to disturb nature, and consider taking photos to share your discoveries with others.

Complete the challenge:

1. Check off a whole row or column.
2. Check off more than 15 boxes in the bingo card!
3. **Bonus!** Check one box for every five types of plants you find or for every two animals not shown below.
4. Try doing this activity with friends in their yards or near their homes to find out whose neighbourhood gets the highest score.

<input type="checkbox"/> Bee <small>Photo: © Parks Canada, L. Narraway</small>	<input type="checkbox"/> Black-capped Chickadee <small>Photo: © Parks Canada, W. Lynch</small>	<input type="checkbox"/> Caterpillar <small>Photo: © Parks Canada, W. Lynch</small>	<input type="checkbox"/> A samara (maple seed)	<input type="checkbox"/> A bird feeder
				
<input type="checkbox"/> Dragonfly <small>Photo: © Parks Canada, J. Pleau</small>	<input type="checkbox"/> Duck <small>Photo: © Parks Canada, W. Lynch</small>	<input type="checkbox"/> Bird of prey	<input type="checkbox"/> Conifer cone <small>Photo: © Parks Canada, J. Pleau</small>	<input type="checkbox"/> Animal tracks <small>Photo: © Terri Perron</small>
				
<input type="checkbox"/> Spider web <small>Photo: © Parks Canada, J. Pleau</small>	<input type="checkbox"/> Grasshopper <small>Photo: © Parks Canada, A. Guindon</small>	<input type="checkbox"/> Freshwater <small>Photo: © Friends of Halifax Public Gardens</small>	<input type="checkbox"/> Hummingbird	<input type="checkbox"/> Tree sapling <small>Photo: © Parks Canada</small>
				
<input type="checkbox"/> Pick-up piece of trash	<input type="checkbox"/> Snake <small>Photo: © Parks Canada, A. Guindon</small>	<input type="checkbox"/> Fruits on a tree <small>Photo: © Parks Canada, J. Pleau</small>	<input type="checkbox"/> Bug on a plant <small>Photo: © Parks Canada, J. Pleau</small>	<input type="checkbox"/> A woodpecker hole
				
<input type="checkbox"/> Deciduous tree leaf <small>Photo: © Parks Canada, D. A. Wilkes</small>	<input type="checkbox"/> Pet dog or cat <small>Photo: © Parks Canada, A. Cornellier</small>	<input type="checkbox"/> Moss <small>Photo: © Parks Canada, L. Narraway</small>	<input type="checkbox"/> Toad <small>Photo: © Parks Canada, W. Lynch</small>	<input type="checkbox"/> Pigeon
				

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Want to attract wildlife to your yard?
Try planting native species, putting up a bird feeder or making a compost bin!

Urban Environment: My Diagnosis

Now that you have gathered an abundance of observations, use them to reach your own diagnosis about the health of your urban environment by filling in the chart opposite.

Note: This diagnosis can be printed directly from the BioKits website and used for other park visits.

Explore other BioKits and complementary activities by visiting ec.gc.ca/biotrousses-biokits.



Find out more
See "Ways to Improve the Environment" on page 34

Check the boxes that apply

Excellent!

Not bad but...

Things must improve!

Trees, bushes, balcony planters and gardens providing a biological corridor between your home and the park

First impression of the park

Surrounding sounds

Air quality

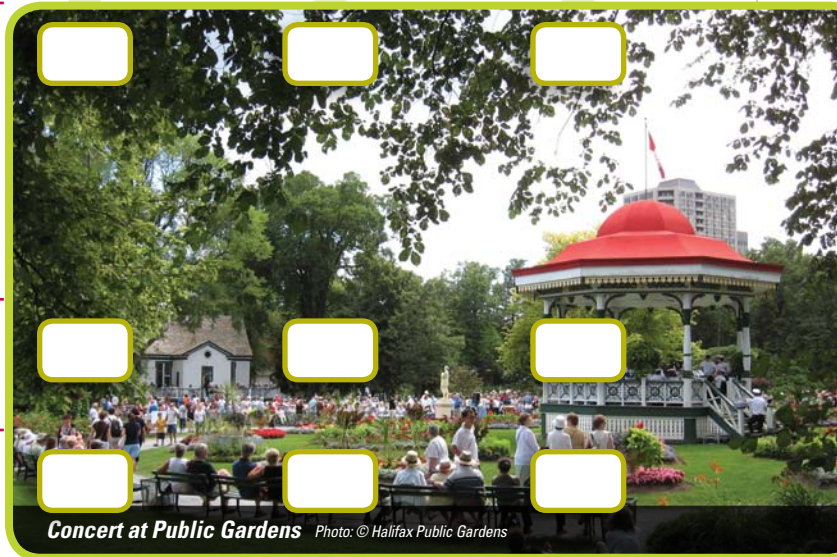
Biodiversity: plants and trees

Biodiversity: animals

Presence of pollinators

Invasive plant control

Waterways, ponds or lakes



Recommendation: Enjoy your environment and help preserve the threatened species in your area. Choose one thing you would like to improve and think up a feasible solution. Many heads are better than one! Talk to people about your concerns; they might join your improvement efforts.



Black swallowtail caterpillar

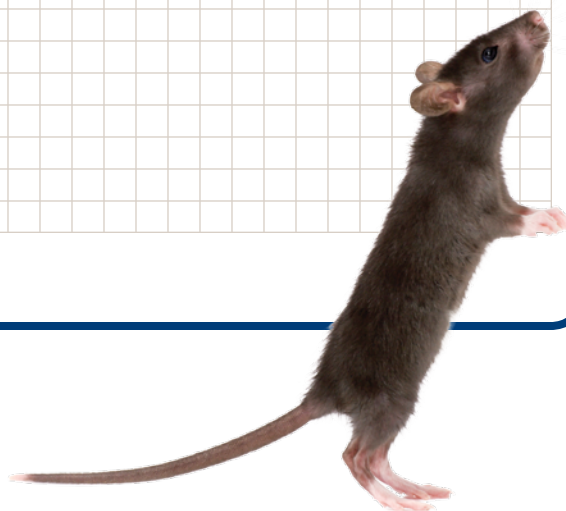
Think Back on Your Outing

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Back Home

Create a souvenir of your excursion by making a drawing, story, poem, photo or collage.

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Encourage Biodiversity

Now it's your turn

to promote biodiversity in HRM! If you have access to a yard or just a balcony, you can take action!

What actions will you take?

Compost outdoors or indoors using vermicomposting.



Maintain a yard that welcomes biodiversity.



House Sparrow



Photo: © Halifax Farmers Market



Photo: © Halifax Farmers Market

Purchase local organically grown foods and local-sourced seafood.

Do not plant invasive alien plants.



Photo: © Laura Richardson

Grow vegetables in a community garden, a yard or in containers.

Want to start a community garden on HRM public property? Visit: myhrm.ca/ToolKit/CommunityGardens.php

Make your schoolyard and playground greener.



Care for your lawn in an environmentally friendly way.



Did you know...

In 2000, Halifax was one of the first major cities in North America to introduce a pesticide control bylaw.

It is estimated that several million birds fall prey to cats each year in Canada. To help make your neighbourhood more bird-friendly:

- Consider keeping your cat indoors, particularly from dawn until dusk
- Place a colourful collar around your cat's neck with a couple of bells
- Set up safe birdhouses and feeders that cats cannot easily reach
- Promptly report any stray or feral cats
- Turn off any unneeded lights at night



Find Out More



LEARN MORE ABOUT NATURE:

Halifax Field Naturalists	halifaxfieldnaturalists.ca
Young Naturalists Club	nature1st.net/ync
Nova Scotia Bird Society	nsbs.chebucto.org
Wild Flora	nswildflora.ca
Thousand Eyes	thousandeyes.com
Virtual Museum of Canada	museevirtuel-virtualmuseum.ca
Adventure Earth Centre	earthed.ns.ca
Nova Scotia Museum of Natural History	museum.gov.ns.ca/mnhnew

AIR ISSUES:

Environment Canada – Air	ec.gc.ca/air
HRM – Air Quality	halifax.ca/environment/airquality.html

WATER AND MARINE ISSUES:

HRM – Halifax Water	halifax.ca/hrwc
Ecology Action Centre	ecologyaction.ca/content/marine

WAYS TO IMPROVE THE ENVIRONMENT:

Nova Scotia Nature Trust	nsnt.ca
Clean Nova Scotia	clean.ns.ca
Ecology Action Centre	ecologyaction.ca
HRM – Get Involved	halifax.ca/environment/getinvolved.html
Great Canadian Shoreline Cleanup	shorelinecleanup.ca

HEALTHY COMMUNITIES:

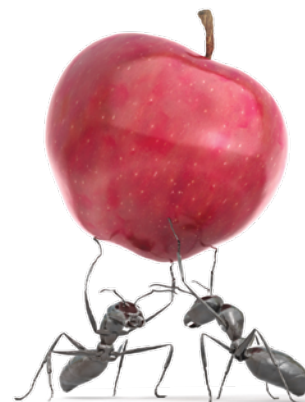
Federation of Canadian Municipalities	sustainablecommunities.fcm.ca
My HRM.ca	myhrm.ca/About
Halifax Farmers Market	halifaxfarmersmarket.com
Halifax Waste Resource Management Strategy	toolsofchange.com/English/CaseStudies/default.asp?ID=133
Heart and Stroke Walkabout	walkaboutns.ca

URBAN BIODIVERSITY ISSUES:

Pollination Canada	pollinationcanada.ca
Halifax Urban Greenway	halifaxurbangreenway.org
HRM – Invasive Species	halifax.ca/environment/InvasiveSpecies.html

NICE PLACES TO VISIT:

Nova Scotia Trails Federation	novascotiatrails.com
Parks Canada	pc.gc.ca
Friends of McNabs Island Society	mcnabsisland.ca
Halifax Public Gardens	halifaxpublicgardens.ca
Shubenacadie Canal Commission	shubie.chebucto.org
Sackville Rivers Association	sackvillerivers.ns.ca
Point Pleasant Park	pointpleasantpark.ca





Halifax Waterfront

PRODUCTION TEAM

The Halifax Regional Municipality Urban BioKit is an adaptation of the Urban BioKit.

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Explore other BioKits and complementary activities by visiting ec.gc.ca/biotrousses-biokits.