



2017

Ecofriendly Waterfronts

On the Rideau Canal Waterway

Hillary Quinn-Austin
BIOLOGY DEPT., QUEEN'S UNIVERSITY

THE IMPORTANCE OF NATURAL SHORELINES

The Rideau Canal waterway is a string of beautiful lakes, rivers, and wetlands that stretches from Kingston to Ottawa. Along this waterway, shoreline habitats are home to numerous types of **wildlife**, and their beauty are what makes this region so vibrant.

Shorelines are the transition from land to water, and are critical habitat for many species worldwide. Wildlife species use shorelines for food, shelter, breeding and rearing of young. Without natural shorelines, we may see less of the wildlife that make the Rideau Canal waterway so special.

Natural shorelines are also important for maintaining the processes that keep our waterways healthy and clean. Without strong layers of vegetation, including trees, shrubs, flowers, grasses, and aquatic vegetation, **shorelines can degrade**. Plants and their roots prevent erosion, runoff, and keep water clear and beautiful. A hardened shoreline, which includes mowed down lawns, pavement, retaining walls, and riprap, can lead to turbid water and algal blooms from erosion and nutrient influx. This degrades wildlife habitat, causes a loss of recreational opportunities, and can contaminate drinking water sources.

WHY SHOULD WE CARE?

Waterfront properties are some of the most valuable and loved places to live. People cherish being able to retreat to the comforts of the wilderness, either permanently or seasonally. The Rideau Canal waterway is a popular destination for tourism and waterfront properties, and as shoreline development continues to increase, the sensitive landscapes that make it so beautiful are put at risk.

If the natural shorelines are lost, water clarity, safe swimming areas, and our favourite plants and animals may slowly disappear. Species at risk, including many birds, turtles, and fish, are especially vulnerable to the effects of shoreline degradation. If we want to maintain the joys of our valuable wilderness properties for future generations, we must be aware of the current impacts we may be making on the landscape.

For these reasons, it is essential to find ways to reduce our impact on the waterway, preserve the natural system, and strive to create ecofriendly and sustainable waterfront properties!

WHAT CAN WE DO?

There are many simple ways we can make our waterfront properties more sustainable and healthy! It starts with keeping the property natural - avoid creating hard landscapes with lawns and pavement. It is essential to keep a natural vegetated shoreline buffer between your property and the water body. Be careful when building docks, boathouse and swimming areas to maintain aquatic vegetation and protect sensitive wetland habitats.

It is also important to avoid the used of fertilizers, pesticides, detergents with phosphorus, and leaky septic systems - these can all lead to polluted water, algal blooms, and turbid water. Lastly, we always want to avoid the spread of invasive plants and animals like zebra mussels. Make sure to plant native plants and always wash boats and other aquatic equipment before moving between water bodies.

USEFUL RESOURCES:

Explore these resources to learn more about how to create a healthy, natural waterfront!

A Shoreline Owner's Guide to Healthy Waterfronts (FOCA)

https://foca.on.ca/wp-content/uploads/Shoreline_Owners_Guide_2015/index.html

Information for Shoreline Property Owners along the Rideau Canal waterway (Parks Canada)

<http://www.pc.gc.ca/eng/lhn-nhs/on/rideau/visit/riverains-shoreline.aspx>

Shoreline Naturalization Program - see 'Shoreline Naturalization Resources' (Rideau Valley Conservation Authority)

http://www.rvca.ca/programs/shoreline_naturalization_program/index.html

Ecology of the Rideau Region - see 'Permits and Regulations' (Rideau-info.com)

<http://rideau-info.com/canal/ecology/index.html>

The Nature of the Rideau River (Canadian Museum of Nature)

<http://www.nature.ca/rideau/h/h2-e.html>

Love your Lake (Watersheds Canada)

<http://watersheds.ca/our-work/love-your-lake/>

The Natural Edge (Watersheds Canada)

<http://watersheds.ca/our-work/the-natural-edge/>

CLOSING STATEMENTS

With summer on its way, city-goers will be migrating to the Rideau Canal waterway for another season of swimming, boating, and relaxing with friends and family. Home makeovers and construction projects that have been dreamt of throughout the long winter will finally be starting up again. Let's make sure to keep the natural beauty of the Rideau lakes at the forefront of our projects!

Please share the **infographic** on the following pages with friends and family who own a shoreline property in Ontario!

ECOFRIENDLY WATERFRONTS

ON THE RIDEAU LAKES



A GUIDE TO CREATING A SUSTAINABLE PROPERTY BY
MAINTAINING NATURAL SHORELINES

As the Rideau Canal Waterway becomes an increasingly popular destination for retreat and recreation, shoreline development on waterfront properties is growing.



To continue enjoying the beautiful landscapes that are so close to our hearts, it is important to understand how we may be making impacts and how to reduce them to preserve the landscape for future generations!



SHORELINE DEVELOPMENT OFTEN CONVERTS:



natural shorelines

hardened shorelines

which takes away habitat for native species and can diminish water quality.

DISTURBED HABITATS:

- decrease native biodiversity
- facilitate the establishment of destructive invasive species.



Common loon



Blanding's turtle



Zebra mussels



Spiny water fleas

It is important to look after our shorelines to avoid losing our pristine waterways and beloved wildlife!

ECOFRIENDLY WATERFRONTS ON THE RIDEAU LAKES



SIX STEPS TO CREATING A SUSTAINABLE PROPERTY BY MAINTAINING NATURAL SHORELINES

Hillary Quinn-Austin, 2017



NATURAL LANDSCAPE

Keep natural trees, understory vegetation, and woody debris rather than creating lawns and paved areas. This will prevent runoff and erosion, which decrease water quality.

SENSITIVE HABITATS

Avoid the destruction of wetlands and marshes, which are often critical habitat for sensitive species and contain high biodiversity. Be careful when constructing docks and boat houses.



RIPARIAN BUFFER

Maintain shoreline stability using natural methods like a vegetated or bioengineered buffer rather than retaining walls or rip rap, which create hard shorelines.

SAFE WASTE

Avoid the use of fertilizers, pesticides, detergents with phosphorus, and leaky septic systems, which all lead to harmful algal blooms and water turbidity.



NATIVE PLANTS

Plant native plants in your garden which can attract pollinators and provide food for organisms. Avoid introducing foreign plants that might be invasive.

CLEAN BOATS

Always thoroughly clean your boats and other aquatic equipment after moving between water bodies to avoid spreading invasive species like zebra mussels.

