



# Living by the Water's Edge

Riding Mountain Biosphere Reserve



# Riding Mountain Biosphere Reserve Water Stewardship Project

2012

A Project by:  
Riding Mountain Biosphere Reserve  
Centre for Sustainable Watersheds



# My Shoreline Action Checklist

I Will...	I already completed or I am completing	I will complete in one year	I will complete in five years
1. Plant native trees and shrubs along areas of my shoreline that lack vegetation			
2. Not mow my lawn so close to the shoreline			
3. When it's safe, leave woody debris (logs, branches, etc.) for wildlife habitat			
4. Not use fertilizers, pesticides, or herbicides			
5. Regularly pump out my septic tank (every three to five years)			
6. Avoid septic tank additives			
7. Use phosphate-free or biodegradable soaps			
8. Switch to alternative cleaners (e.g. baking soda or vinegar)			
9. Install low-flow showerheads and toilets to help conserve water			
10. Conserve water by not running the tap when shaving or brushing my teeth			
11. Install eavestroughs to help reduce runoff from my roof			
12. Direct downspout water to a rain barrel or natural catch basin (e.g. stones or rain garden)			
13. Plant native trees and shrubs in areas with thinning grass or exposed soils to mitigate erosion			
14. Limit foot traffic on sensitive slopes by choosing one access point			
15. Replace hardenend (concrete) steps with raised wood stairs with open backs			
16. Soften any shoreline walls by covering them to natural slopes			
17. Choose an environmentally friendly dock such as a floating, cantilever, or post dock			
18. Upgrade to a cleaner direct-injected two stroke or a four-stroke boat motor			
19. Refill portable fuel tanks on land using a funnel to minimize spills into the water			
20. Use boat racks to store canoes and kayaks instead of placing them on the ground			
21. Reduce light pollution by using efficient bulbs with shielded fixtures			
22. Keep boat clean to prevent polluting the water or spreading invasive species			

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# Riding Mountain Biosphere Reserve

Dear Riding Mountain Biosphere Reserve Member,

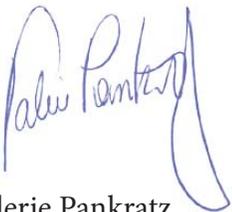
In partnership with the Centre for Sustainable Watersheds (CSW), the Riding Mountain Biosphere Reserve presents an engaging water stewardship education package for residents and users of lands adjacent to waterways in the Riding Mountain Biosphere Reserve.

Living by the water's edge, whether it be a lake, river, stream, or marsh, brings about more challenges and responsibilities to the landowner as their actions can directly impact the health of the waterbody. The shoreline is an extremely diverse environment that provides essential habitat for numerous plant and animal species. However, simple actions like excessive fertilizing or the removal of shoreline vegetation can destroy a shoreline and in time, the corresponding body of water.

In this guide, we have included a number of activities and steps for landowners to take in order to both preserve and enhance their shorelines. By encouraging activities like green boating, water conservation, proper septic maintenance, and habitat protection, we hope to ensure the preservation of the region's rich and diverse waterbodies.

By providing specific, relevant information, we hope to instill a sense of ownership that will propel residents to take positive environmental action to protect this unique area for future generations.

Sincerely,



Valerie Pankratz  
Executive Director  
Riding Mountain Biosphere Reserve

## **Acknowledgements**

The Riding Mountain Biosphere Reserve would like to thank the following organizations for their expertise, assistance, and funding in helping to create this project:

- Centre for Sustainable Watersheds
- Riding Mountain National Park
- Friends of Riding Mountain National Park
- Little Saskatchewan River Conservation District
- Science Horizons
- Environment Canada

Funding for the printing of this publication was provided by the TD Friends of the Environment Foundation.

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# The Riding Mountain Biosphere Reserve

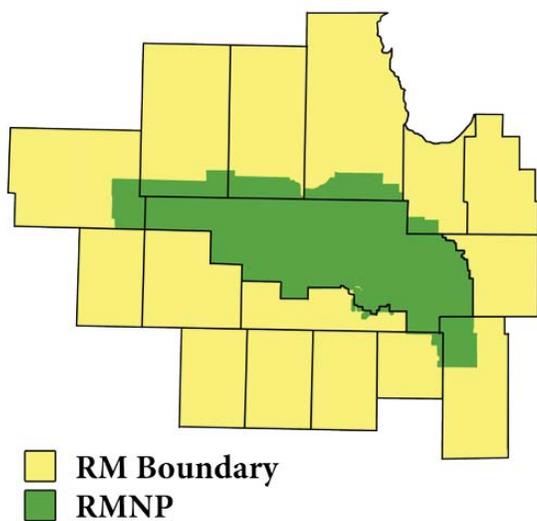
The Riding Mountain Biosphere Reserve (RMBR) is a non-profit organization that seeks to balance the conservation of natural and cultural heritage with sustainable resource development in the area surrounding Riding Mountain National Park. The RMBR includes the voluntary support of local business, community, educational, and government partners working cooperatively to support prosperous local economies while maintaining healthy ecological communities.

## What Does “Biosphere Reserve” Mean?

A “biosphere reserve” is a designation of recognition from the United Nations Educational, Scientific, and Cultural Organization (UNESCO) for an area that demonstrates a “balanced relationship between humans and the biosphere.” Through collaborative efforts among people in the biosphere reserve, we promote the sustainability of local economies and communities and the conservation of their ecosystems. Biosphere reserves are intended as special areas where people demonstrate better approaches to conservation and sustainable resource use. A biosphere reserve also serves as a mechanism for regional planning and multi-sector collaboration. It offers an opportunity for the community to conceive what they want for the region and to work toward achieving it.

The Biosphere Reserve does not have any law-making or land-use changing powers. Rather, it promotes voluntary initiatives, with the main goal being to seek a balance between the conservation of natural and cultural heritage and sustainable economic development.

To learn more about the function of a biosphere reserve, please visit our website at [www.rnbr.ca](http://www.rnbr.ca).



## Biodiversity

Our protected core is Riding Mountain National Park, and the area of cooperation includes fifteen surrounding rural municipalities. The core area covers some 3,000 km<sup>2</sup> (1,660 mi<sup>2</sup>) of mixedwood forest (white spruce and trembling aspen, known locally as white poplar), eastern deciduous forest (ash, oak, elm, and cottonwood), and rough fescue prairie.

The surrounding area of cooperation comprises an additional 12,000 km<sup>2</sup> (4,600 mi<sup>2</sup>), containing 29,000 residents, and has largely been developed for the growing of grain and forage crops and the production of livestock. In addition, the area is rich in lakes, streams, and natural habitat. Hunting, guiding, and eco-tourism contribute to the local economy.

## Research

Biosphere reserves provide excellent opportunities for research. The core area of the Riding Mountain Biosphere Reserve, Riding Mountain National Park, preserves the diversity of local forms of life and serves as a baseline against which we can measure our use of resources. Some day we may desperately need the genes of plants or animals that have disappeared on land that is cultivated or grazed. Professionals can also study the interaction between wildlife and humans and can suggest ways to avoid conflict.

## People

Biosphere reserves are not places set aside from human use and development – human activity and the health of people and communities are an essential part of the biosphere reserve program. Residents and organizations in a biosphere reserve use a variety of activities to address conservation and sustainable development in ways that are meaningful for them; they also have opportunities to share their discoveries with others.

## Management

The Riding Mountain Biosphere Reserve is managed by a committee of area residents appointed by member rural municipalities. In addition to these individuals, professionals provide advice and scientific information. Biosphere reserves can teach us principles of harmonious existence, which help us develop attitudes that will permit future generations to also have a good life.

## Three Functions of a Biosphere Reserve

### 1. Conservation of Biodiversity

- Protecting the long-term health, integrity, and diversity of flora, fauna, and the region's natural landscape

### 2. Sustainable Development

- Helping citizens, businesses, and government find sound approaches to land use and resource use that is sustainable for society and the environment, now and in the future

### 3. Capacity Building

- Helping citizens, businesses, and government make informed decisions using scientific research, monitoring, education, and training.

## UNESCO Designated

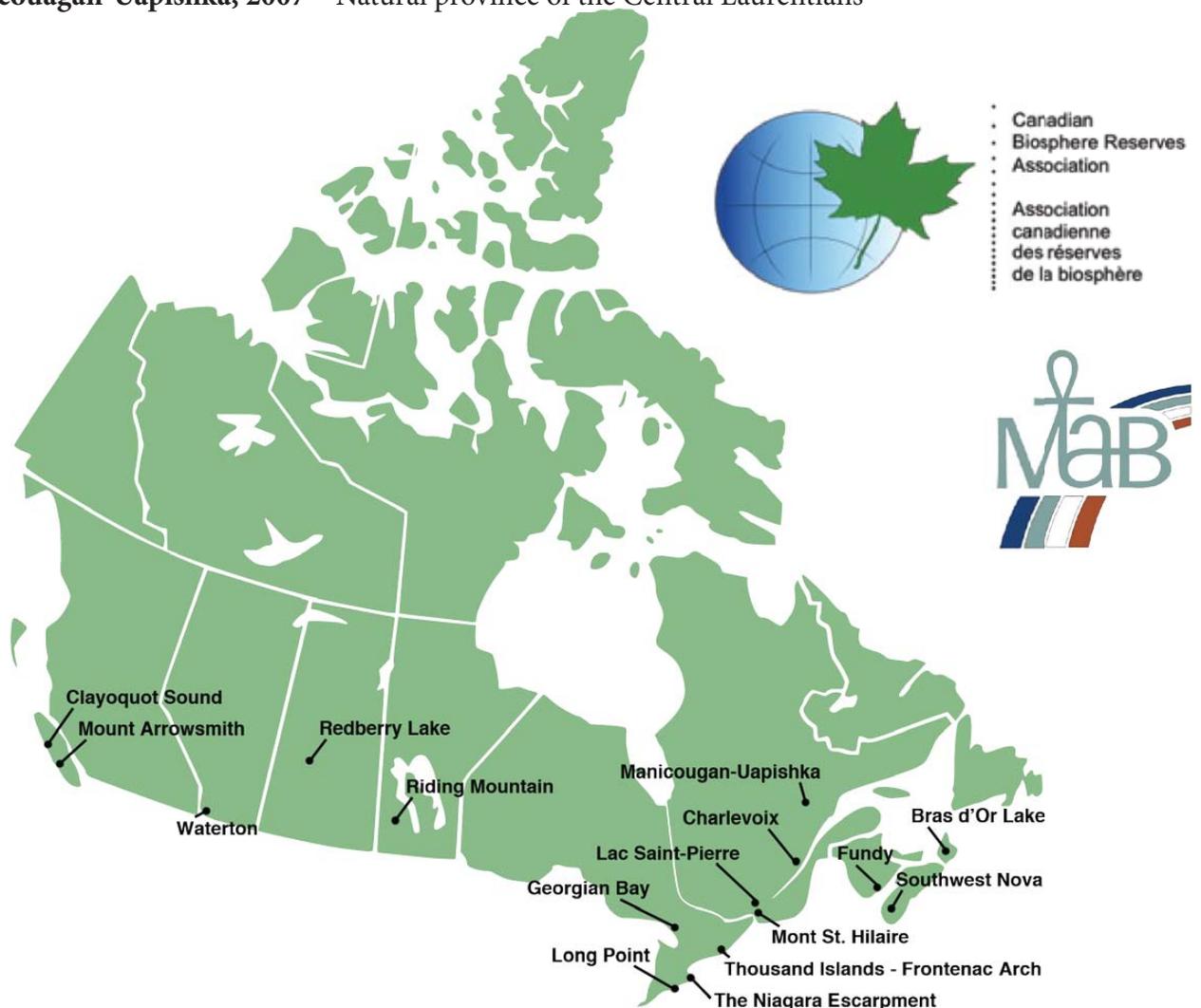
The Riding Mountain Biosphere Reserve was designated in 1986, following application to UNESCO from the fifteen rural municipalities that make up the area of cooperation, the Province of Manitoba, and Riding Mountain National Park of Canada.

## Education

The Riding Mountain Biosphere Reserve actively participates in and promotes programs developed to help the youngest members of our society learn about biosphere reserves' conservation of biodiversity and sustainable development.

## The Biosphere Reserves of Canada

- **Bras d'Or Lake, 2011** – Unique estuarine ecosystem
- **Charlevoix, 1988** – Boreal needleleaf forests and woodlands
- **Clayoquot Sound, 2000** – Temperate rainforests, including marine/coastal component
- **Fundy, 2007** – Acadian Forest, estuarine systems, and non-forest ecosystems
- **Georgian Bay Littoral, 2004** – Freshwater coastline and islands
- **Lac Saint-Pierre, 2000** – Estuarine systems and freshwater wetlands
- **Long Point, 1986** – Temperate and sub-polar broadleaf forests and woodlands including lake system
- **Mont Saint-Hilaire, 1978** – Temperate broadleaf forests and woodlands
- **Mount Arrowsmith, 2000** – Temperate rainforest, including marine components
- **Niagara Escarpment, 1990** – Temperate broadleaf forests and woodlands
- **Redberry Lake, 2000** – Temperate grassland and saline lake
- **Riding Mountain, 1986** – Temperate grasslands, boreal needleleaf forests, and woodlands
- **Southwest Nova, 2001** – Boreal needleleaf forests and woodlands
- **Thousand Islands - Frontenac Arch, 2002** – Temperate and sub-polar broadleaf forests, woodlands, and boreal needleleaf forests
- **Waterton, 1979** – Mixed mountain and highland systems, lakes, and freshwater wetlands
- **Manicouagan-Uapishka, 2007** – Natural province of the Central Laurentians



# Projects in the Riding Mountain Biosphere Reserve

## Native Species Garden

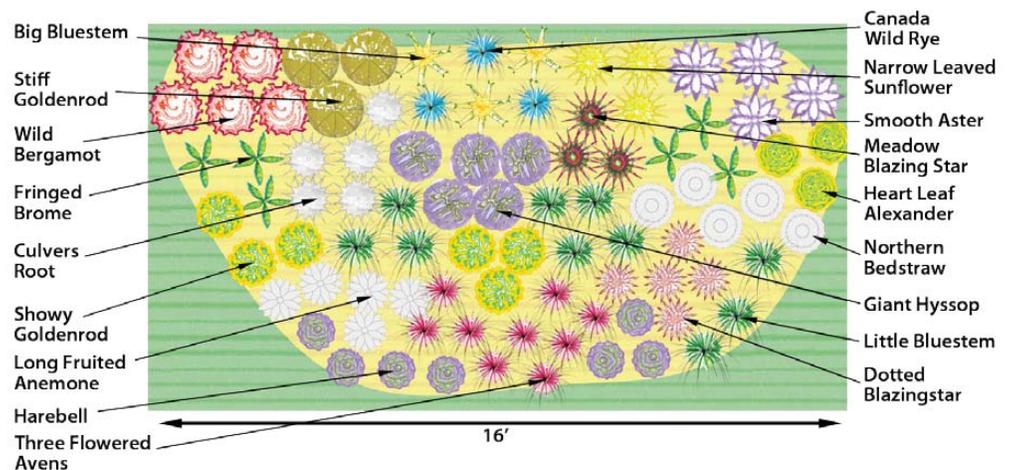
In the Summer of 2011, the Riding Mountain Biosphere Reserve began work on three new Native Species Gardens at the Erickson office. In total, three gardens were dug and planted but more are planned for the near future. These gardens are intended to highlight the area's native species and to encourage others to plant similar species. One of the many advantages of planting native plant species is that they provide excellent shelter and food to native animal species. Each garden has a theme related to the characteristics of its species.

The Butterfly Garden is a collection of native species that butterflies find delicious. A wide variety of wildflowers were included to ensure that this garden would remain colourful throughout the summer! The species planted here include Giant Hyssop, Prairie Sage, Dwarf Milkweed, and Prairie Crocus.

The Bird Garden includes native plants that birds flock to due to plentiful amounts of insects and natural cover in both summer and winter. These species are highly adaptable to a variety of weather conditions and include species like Big Bluestem, Gaillardia, Wild Bergamot, and Tall Coneflower.

The final garden is the Deer Resistant Garden. As its name suggests, the species planted here naturally discourage deer from defoliating the garden. Though, these species are unpalatable for the deer, this certainly doesn't detract from their beauty! Species planted here include Showy Goldenrod, Harebell, Smooth Aster, and Dotted Blazingstar.

## Deer Resistant Garden 90 Plants



If you are interested in learning more about the gardens and native species in the area, please visit our website at [www.rmbr.ca/projects/native-species-garden](http://www.rmbr.ca/projects/native-species-garden). Check out the Riding Mountain Biosphere Reserve Native Species Garden located at the RMBR Erickson office located at 61 2<sup>nd</sup> Street NE.

## Parkland Habitat Partnership: Invasive Species Network

In partnership with the Parkland Habitat Partnership, the Riding Mountain Biosphere Reserve is examining the presence of invasive species in the area. As part of its commitment to ensuring that the Biosphere Reserve's waterbodies and waterways remain healthy in the future, this project will be studying invasive species on the land as well as those in the water.

For more information, visit our website at [www.rmbr.ca/projects/rmbr-invasive-species-network](http://www.rmbr.ca/projects/rmbr-invasive-species-network).

## At the Farm Gate Market

We all know that there is a growing trend of people who are following the “100-mile Diet”, eating locally, cooking more meals at home, and becoming aware of sustainable eco-conscious eating and green foods. These same people are concerned about the quality of the food that they are eating, their health and the health of the environment.

The Riding Mountain Biosphere Reserve would like to help these “locavores” find locally produced, fresh products that many of our small family farms are already producing and selling “At the Farm Gate”, such as farm fresh eggs, grass-fed or free-range beef, pork, and chicken, jams, jellies and preserves, baking, fruits, vegetables, and much more.

Our goal is to help build a stronger rural regional economy by encouraging people who live, work, and play in the RMBR region to purchase food and other necessities locally, to get to know where their food comes from, and to get to know their farmer. In order to do so, we need to show them where these products are available.

At the Farm Gate Markets are held twice a year, once in the spring and again in the fall.

To learn more about the At the Farm Gate Market and local producers and artisans, visit our website at [www.rnbr.ca/projects/at-the-farm-gate](http://www.rnbr.ca/projects/at-the-farm-gate)

