

Sustainability & Canada's National Parks



Introduction

An increasingly important issue in today's world is sustainability. Since the start of the Industrial Revolution approximately 250 years ago, humans have had a huge impact upon the Earth's natural environment. We now realize that unless we change our approach towards resource use and pollution, the Earth will be damaged beyond repair. These concerns have led to considerable research into sustainability.

The concept of sustainability refers to the use of the Earth's resources in such a way that future generations may enjoy the same resources that we do. Sustainable use of resources would ensure that your children and their descendants will be able to have such things as clean air to breathe, forests to harvest, fish to catch, clean water to drink and good soil to plant crops in. It also would mean that no species would become extinct.

There are many different approaches that governments can follow as they strive to achieve sustainability. In 1885 the government of Canada began to show an interest in sustainability when it established Banff National Park. The park was established to protect an important resource, the mineral hot springs. Since that time, not only has Banff expanded, but the Canadian National Park system has grown to 39 terrestrial parks and 2 marine parks.

In the 1970s Parks Canada decided its long term goal was to create at least 1 park in each of Canada's 48 natural regions. Thirty-nine of these natural regions are on land (terrestrial) and 9 are marine environments. Twenty-five of Canada's terrestrial natural regions are presently represented in the national park system. Ten new parks have been announced, and these will represent 9 additional natural systems. This means that at least 5 additional terrestrial parks must yet be selected and at least 7 additional marine parks are needed.

Many Canadians think of our National Parks as wonderful spots to vacation, but they are much more. The Parks Canada Mandate shown below, refers not only to the tourism aspect of our parks, but also states that the parks are to ensure the ecological integrity of the natural environment for future generations.

Parks Canada Mandate

On behalf of the people of Canada, we protect and present nationally significant examples of Canada's natural and cultural heritage, and foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.



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For more information: www.parkscanada.ca

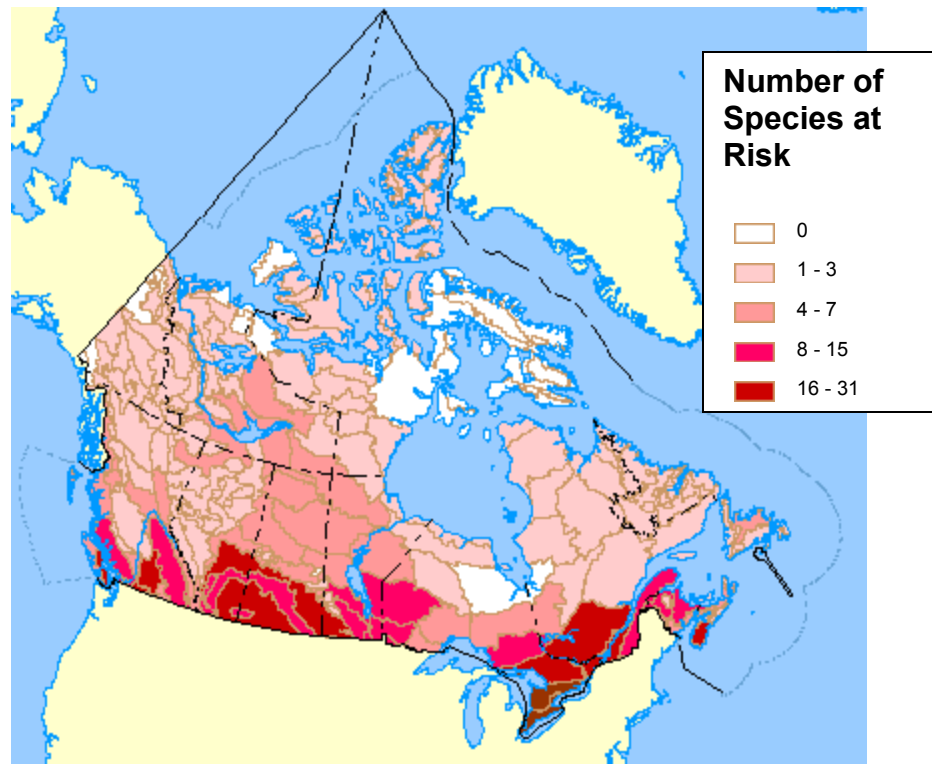
1. Take a look at the map of Canada's National Parks below.



In what regions of Canada are the largest national parks?

Why do you suppose some regions of Canada only have smaller sized national parks?

2. One of the main purposes of the national parks is to ensure the survival of various life forms that are at risk of becoming extinct. With this in mind, compare the map of Canada's National Parks with the **Species at Risk Map** below.



What do the following national parks tend to have in common in terms of species at risk? Kejimikujik, Kouchibouguac, La Mauricie, Georgian Bay Islands, Riding Mountain, Grasslands, Prince Albert and Elk Island

3. Many people believe that the national park system is more important today than it ever was. Explain 2 different reasons to support this idea. Think in terms of the changing urban/rural make up of our population and the changing state of our environment.

5. For one of the groups of Canada's National Parks as outlined in the *Sacred Spaces* video, fill in the chart below. Your instructor will tell you which region to study to make sure that all of the regions are covered by someone in the class.

Province	Name of Park	Date Established	Size (square kilometres)	Best Known for

6. Now you are to choose four possible locations for a new national park within the area you researched for question 5 above. One of the criteria that Parks Canada uses to select sites for national parks is notability of the lifeforms and/or landscape of an area. They should be special, or in other words, not found in many other areas. By designating an area such as this as a national park, the lifeforms and/or landscape have a much greater chance of being preserved. There are other factors that parks Canada must also consider.

What are 2 other factors that Parks Canada might consider prior to selecting a site for a new park? Briefly explain why these factors would be significant.

7. Fill in the larger version of the chart below (which is attached to this booklet) and the **Atlas of Canada** maps listed to assist you. For the Proximity to Major City, Proximity to Other Parks, and the Population Density (are there many people living in the area?) categories, you will have to use other sources, and you will have to decide how to interpret and use the information. Be sure to include the existing parks in the chart, so you can easily keep track of what special features are protected in these parks.

Fill in your copy of the chart in the manner that is best for you. You may wish to simply indicate a number for a particular variable for some categories (for example, 8 to 15 species at risk), and/or describe or list the variable for another category (for example, Till Blanket and Till Veneer).

Park	Proximity to Major City	Proximity to Other Parks	Population Density	Land Cover	Surface Rock Type	Plant Hardiness	Rare Plants	Species at Risk
Existing Park 1								
Existing Park 1								
... etc...								
Proposed Site 1								
Proposed Site 2								
... etc...								

To find the information you need for this activity, go to the **Atlas of Canada** website at www.atlas.gc.ca. In the “Explore Our Maps” section, select

- Environment » Land » Land Cover Map

Using the Zoom to region pull-down menu above the maps select the region you are researching. If you need to zoom in more in order to see a specific site, click on the desired spot on the map. If you are not certain what particular map from the Atlas of Canada is showing, you can check the “Read about this Map” link in the upper left corner of the screen or the text box on every map. Follow the pathways listed below for each of the other 4 maps.

- Environment » Land » Surficial Materials Map
- Environment » Land » Plant Hardiness Zones Map
- Environment » Ecology » Ecology Components » Rare Plant Diversity Map
- Environment » Ecology » Threats to Ecosystem » Species at Risk Map

8. Once you have filled in the chart, examine and analyze the information in it. Decide which of the four sites you believe would be the best one for a new national park. In addition to selecting what you believe is the best site, provide an explanation of why you made the choice that you did. There is no one right answer to the question of where the next national park should be. Make your decision based upon your beliefs, and be certain to justify your choice.

