Chapter 6: Wilderness

INTRODUCTION



Figure 6.1: The province of Newfoundland and Labrador has vast areas of wilderness. Photo courtesy Lem Mayo

Driving the trans-Canada highway between St. John's and Port aux Basques, you might easily believe that our province has vast areas of untouched wilderness. If you flew over the same route, however, you would see that this is not the case—the Island portion of the province, in fact, has very little untouched wilderness. Forestry, hydro development, and expanding towns and cities have all changed the landscape.

In Labrador, on the other hand, development has occurred at a slower pace. Vast tracts of wilderness still exist in the mainland part of the province. These areas have abundant wildlife, clean lakes, unbroken forest, untrodden barrens, and scores of mountains and valleys. But even in Labrador things are changing: major developments such as the nickel mine at Voisey's Bay, the Lower Churchill hydro development, and the Trans-Labrador highway, are slowly chipping away at Labrador's remaining untouched wilderness.

Just how much wilderness is left in Newfoundland and Labrador today? The answer to this question depends on your perception of what "wilderness" is. For example, citizens of St. John's might refer to Pippy Park as a "wilderness area," but a seasoned backpacker or hunter might see a thousand square kilometres of northern Labrador as the only true wilderness in the province.

In this unit you will explore the idea of "wilderness," learn how Newfoundlanders and Labradorians use the outdoors for recreation, and discover how our activities can have both positive and negative effects on wild areas.

DIFFERING VIEWS OF WILDERNESS

Earth was covered by wilderness long before humans made their appearance. Even during most of human history the planet has been wild and the impact of humans has been minimal. The earliest peoples of Newfoundland and Labrador left a light "footprint" on the landscape. They would not have thought of their environment as wilderness but as their home—a natural, though sometimes unknown, place. Only in the last five hundred years or so have humans really begun to leave a more permanent impression on the Newfoundland and Labrador landscape.

Traditionally, the aboriginal peoples of this province considered themselves a part of the natural environment. Their social values and ideals, and knowledge of how to live with nature, meant that the land was their home—and not to be changed in any major way. Early European explorers saw these same lands as wilderness, however—and a wilderness that was threatening. They thought that they had to change the land, and impose their social values and ways of living on it, so that it would no longer be wilderness. They believed it needed to be tamed.



Figure 6.2: Middle Maritime Culture Hunters Returning to a Summer Camp. Francois Girard Photo Copyright Canadian Museum of Civilization, artifact 1-A-39, Photo R. Taylor, 1995, image S95-23502

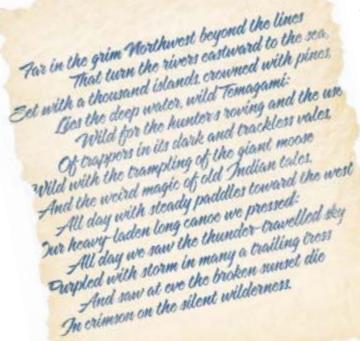
Jacques Cartier saw Labrador as so inhospitable that he referred to it as "the land that God gave Cain." In 1497, John Cabot landed on the coast of Newfoundland. He described it as "rich with a sea that is full of fish." Many early settlers saw the land itself, however, as big and wild—a continual challenge to their survival. Because the wilderness seemed vast and threatening, they placed little value on preserving it.

As life became easier and wilderness areas became more remote from settled areas (and so less threatening), Canadians began to show their appreciation of the beauty



of the wilderness through artistic expression. One of Canada's best-known early poets, Archibald Lampman (1861–1899), wrote about his love of nature and wilderness. At the turn of the century, artists began painting the Canadian wilderness. Some were hired by the Canadian Pacific Railway to produce paintings of the scenery across the country. These paintings were used in advertisements to attract tourists and exhibited in art galleries. Members of the Group of Seven,

perhaps the most famous group of Canadian artists, painted landscapes of the Canadian Shield, the Rocky Mountains, and Labrador.



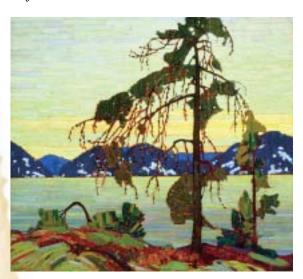


Figure 6.4: "Jack Pine" by Tom Thomson, a member of the Group of Seven.

Figure 6.3:
Archibald Lampman,
and his poem "Temagami".
Lampman is recognized as one
of Canada's finest early poets.
He wrote sonnets about nature
in the nineteenth century.

Photo: Archibald Lampman (b. Nov. 17, 1861 - Feb. 10, 1899). Ottawa, Ont., Dec. 1889 by William James Topley Source: Library and Archives Canada/Credit: Topley Studio/PA-027190 Toward the end of the nineteenth century, hunting and fishing started to become more a leisure activity and less a survival skill. At the same time, people began to realize that wilderness was not inexhaustible and had to be conserved and protected. And so protected areas, such as national and provincial parks, were established.

The first national park in the world was created in 1872 at Yellowstone, in the western United States. In 1885 the government of Canada followed suit, establishing Banff National Park in the Rocky Mountains. Newfoundland and Labrador's first national park, Terra Nova National Park, was established in 1957, and was followed by Gros Morne National Park (1973) and Torngat Mountains National Park Reserve (2005). The province's first provincial park was Sir Richard Squires Memorial Park, established in 1954. Today, enjoying protected areas such as national and provincial parks is a vital part of Newfoundland and Labrador life.



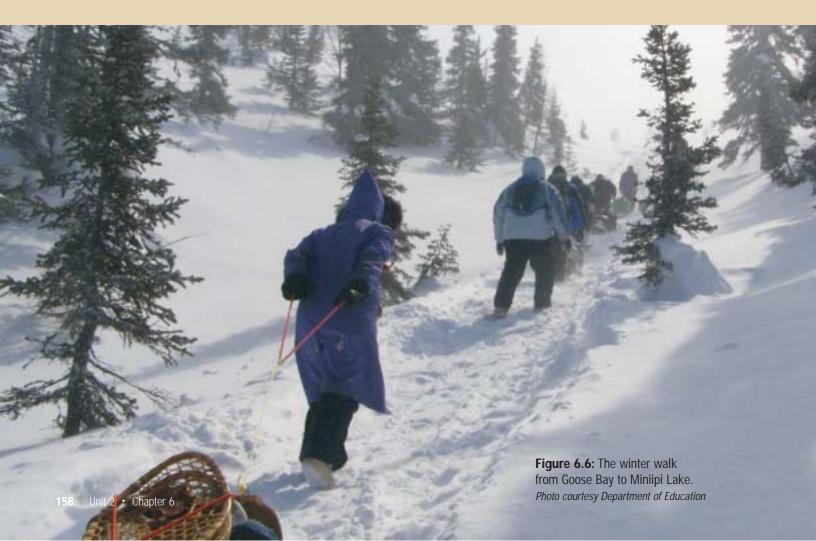
Figure 6.5: Elizabeth Penashue, Innu conservationist. *Photo courtesy of Department of Education*

Elizabeth Penashue understands the importance of wilderness to culture and the human spirit. Born into hunting and trapping Innu family who lived at Kanekuanikat, Labrador, she moved to Sheshatshiu in the 1960s. Her father's hunting and trapping equipment, and also his trap lines, were lost when the the Smallwood Reservoir was created during the development of Churchill Falls.

Elizabeth and her husband Francis attempted to go back to the old way of life, to return to the land. During the 1970s and '80s, however, low-level military flying exercises out of Goose Bay were conducted over land that the Innu used for hunting. Elizabeth became a leader in the opposition to the low-level flying, which she believed negatively affected wildlife.

Elisabeth Penashue continued to promote the Innu's traditional lifestyle and relationship with the land by organizing a winter walk from Goose Bay to Miniipi Lake in the Mealy Mountains, as well as a canoe voyage along the Churchill River (to focus attention on potential problems that damming the Lower Churchill might cause). Her efforts have drawn much public attention; the Innu struggle has been the subject of many articles, a book (Marie Wadden's *Nitassinan*), and a film (the National Film Board's *Hunters and Bombers*).

Source: Memorial University of Newfoundland, 2005 Convocation Program



PRESERVATION VS. CONSERVATION

There is some confusion about the definition of "conservation"— how you understand it probably depends on your beliefs. Most people agree that "to conserve" means to use something wisely, yet they may also think conserving *forests* means to preserve them or set them aside.

In fact, **conservation of wilderness** means we can use it, but in a sustainable way—so that it will be there for others to enjoy in the future. **Preservation of wilderness**, on the other hand, means we will set it aside and *not* use it. Both of these approaches can be appropriate, depending on our goals for a wilderness area.

One of the central controversies that surfaced during the twentieth-century's environmental movement was the disagreement between those who wanted to preserve wilderness and those who supported a managed use of its natural resources (which is sometimes referred to as "managing resources on a sustainable yield basis"). The two approaches have been explained this way: "Conservation is the maintenance of environmental quality and resources or a particular balance among the species present in a given area. The resources may be physical (fossil fuels, for example), biological (such as boreal forests), or cultural (such as ancient monuments). In modern scientific usage, conservation implies sound biosphere management within given social and economic constraints, producing goods and services for humans without depleting natural ecosystem diversity, and acknowledging the naturally dynamic character of biological systems. This contrasts with the **preservationist** approach which, it is argued, protects species or landscapes without reference to natural change in living systems or to human requirements."

Sources: Jastrzembski, Patrice. Conservation vs Preservation (http://iaa.umd.edu/mfa/ee18.htm)

Allaby, Michael. 1994. *The Concise Oxford Dictionary of Ecology* Oxford: Oxford University Press (as quoted at www.texasep.org/html/Ind/Ind_5pub_cons.html)

CHECK your Understanding

- 1. List the landscape characteristics that make Newfoundland and Labrador an ideal place for outdoor recreation, and a desirable destination for tourists.
- 2. Briefly summarize early ways of thinking about the Canadian wilderness.

For Further Discussion and/or Research

- 3. Authors and filmmakers have written and produced many books and videos that feature the Newfoundland and Labrador wilderness. Choose one to watch or review, and write a short report about what the creator says about the province's wilderness and outdoor activities.
- 4. Do you have any memorable wilderness experiences, such as fishing with your parents, hunting, hiking, or enjoying good times at the cabin? Write a short paragraph, make a drawing, or put together a photo collage or web page that communicates your experience.

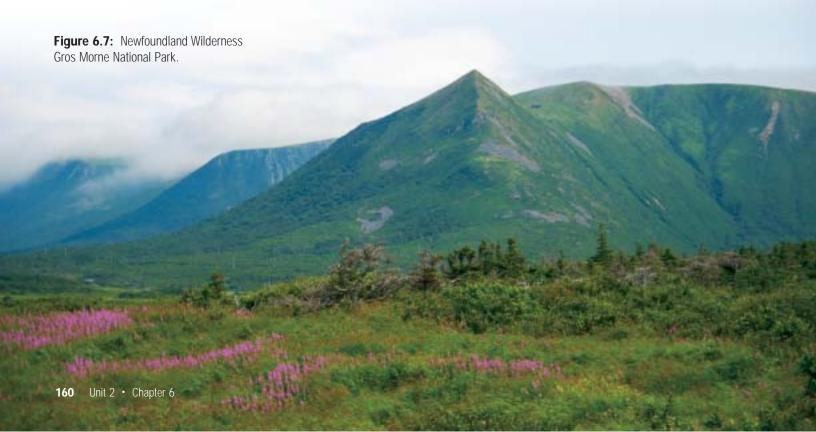




Figure 6.8: Saglek Fjord in northern Labrador. Photo courtesy Parks Canada

WHAT IS WILDERNESS?

Many people have attempted to define "wilderness." Some definitions are simple, such as: "a wild and uninhabited area" or "a tract of unproductive land." Others are longer and more complicated. The American *Wilderness Act* of 1964 was the first formal attempt to define and designate land as "wilderness." It defined an area of wilderness as "Undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions, and which generally appears to have been affected primarily by the forces of nature, with the imprint of man's work [human activity] substantially unnoticeable; has outstanding opportunities for solitude or a primitive and unconfined type of recreation; has at least five thousand acres of land or is of sufficient size as to make practical its preservation and use in an unimpaired condition; and may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."



Figure 6.9: Teenager enjoying an evening of fishing. Photo courtesy Department of Natural Resources

How do *you* define wilderness? Is it a special place in the forest near your favourite fishing or swimming hole? A special place to sit and watch moose on an early October morning? Is it a feeling more than a location on the ground?

"Wilderness," for the purposes of this course, means large areas of land without human-built structures, places where the ecosystems are largely unaffected by humans or, when we do travel there, we are visitors who leave a light footprint and do not stay long. Our definition also recognizes that "wilderness" is a human concept that can vary from person to person. The more experienced we are with the outdoors environment, the more we will associate "wildness" with

"wilderness." However people define wilderness, it is generally agreed that ensuring the survival of wilderness areas is important for all of us.

Arguments for maintaining wilderness areas include:

- Wilderness provides a refuge for all wildlife, especially species at risk.
- It is a place for solitude and recreation.
- Its naturally functioning systems can serve as a baseline for ecological research.
- It can be used as a living laboratory.
- It is the planet's life-support system, producing oxygen and storing carbon dioxide.
- It is a place to see, feel, smell, and enjoy natural beauty.

WILDERNESS AND VALUES

People value wilderness in many different ways. Wilderness values can be categorized as "personal" or "commercial." An example of a personal value is fishing in a forest pond; business ventures, such as campgrounds, tourism operations, and outfitting are examples of commercial values. Personal and commercial values associated with wilderness include:

- the enjoyment of the outdoors, reduction of stress, and our increased physical fitness when we engage in traditional and non-traditional activities such as hunting, fishing, snowmobiling, mountain biking, backpacking, riding an ATV, and backcountry skiing
- economic benefits to local communities through jobs, tax revenue, and tourism
- opportunities for families to make links between generations: wilderness provides a setting for parents to teach their children how to hike, camp, identify wildlife, hunt, and fish
- the enrichment of our culture: many noted books, plays, stories, poetry, dance, films, and artwork have themes related to our love of nature and the outdoors

- the stimulation of individual and public interest in the environment, which can increase public involvement in issues such as air and water quality, and protection of endangered species and spaces
- non-recreational benefits such as peace, solitude, and spiritual and inspirational nourishment
- its function as a living laboratory from which we can measure changes in our environment
- · support for the right of all living things to exist

This is just a partial list. What values would you add to it?

Preserving wilderness is not seen as important everywhere in the world. For some people, the idea of setting land aside has little value. This is often the case in developing countries, where supporting basic human needs—food, water, and energy—overshadows the importance of preserving landscapes and biodiversity.

Even here at home, the wilderness and how we see and manage it are changing. How do you think Newfoundlanders and Labradorians will value wilderness in the future?

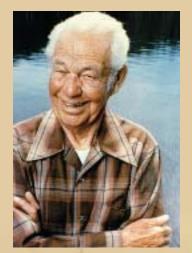


Figure 6.10: Sigurd F. Olsen was one of the first to write on the value of wilderness. *Photo courtesy of the Olson family*

Sigurd Olson's Wilderness Values

American author and conservationist Sigurd F. Olson (1899–1982) wrote about the values he experienced through wilderness recreation. Of the "solitude, silence and freedom of wilderness" he said: "I see more clearly those values and influences that over the long centuries have molded us as a race. One senses anew his relationship to the Earth and all life. The inner world has to do with the wilderness from which we came, timelessness, cosmic rhythms, and the deep feelings men have for an unchanged environment."

His writings identify some important qualities found in wilderness:

solitude	renewal	mystery
freedom	space	pristine and unexplored nature
wildness	silence	vastness
adventure	timelessness	

CHECK your **U** Understandin

- 1. List five values of wilderness.
- 2. Some people have said "there is no such thing as true wilderness." What is your view of "true" wilderness?
- Can wilderness be preserved by setting land aside in parks?

For Further Discussion and/or Research

- 4. Investigate how Aboriginal cultures used the Newfoundland and Labrador wilderness before the first Europeans arrived.
- 5. Rural and urban residents may have different definitions of wilderness. Ask members of your family and neighbours for their definitions of wilderness. Share and compare your results with students at a school in a different type of location than your own (rural or urban).
- 6. Place yourself in the shoes of someone living in an area where logging is one of the best job opportunities available. How would you respond to an agency that was interested in establishing a new protected wilderness area where the best timber is located? Is it possible to satisfy the needs and wants of both groups? Explain your answer.
- 7. Through research, collect definitions of "wilderness" from around the world. Through analysis, identify common themes in the definitions.

USING WILDERNESS FOR PLEASURE AND RECREATION

For more than eight thousand years, the Aboriginal peoples and the pioneer settlers of Newfoundland and Labrador depended on the resources of the land (and the sea) for their survival. Today, many Newfoundlanders and Labradorians still use the land for partial subsistence, and many others use it for outdoor recreation. People think of the wilderness areas here as "ours to enjoy and protect."

Compared to some Canadians, Newfoundlanders and Labradorians have relatively easy access to wilderness. Wild areas are often just a few steps beyond the back door or less than an hour's drive away. The diversity of geography and climate offers opportunities for many types of outdoor recreation. Traditional activities—such as hunting, trapping, fishing, camping, and cutting firewood—have always been popular here. In recent years, skiing, birdwatching, snowmobiling, hiking, canoeing, and sea kayaking have also gained wide popularity.

These types of outdoor recreational activities depend on access to wilderness and pristine environments. Many stresses—including outdoor recreation itself—have the potential to affect the quality of the natural environment, however. How well we protect our wilderness areas from these stresses will determine our ability to continue to use them for outdoor recreation in the future.

Participation in Outdoor Activities

In 1999, the Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians reported that in 1996 twenty million Canadians (84.6 per cent of the population aged fifteen years and over) took part in one or more nature-related activities. In total they spent 1.5 billion days of their time on these activities, and Canadians spent \$11 billion on nature-related activities in the country. This amount included \$6 billion for trip-related items including transportation, accommodation, and food, \$3.1 billion for special equipment, and \$1.8 billion for other items needed to pursue nature-related activities.

The same report reflected some of the ways that the natural environment improves the daily lives of Newfoundland and Labrador residents. In 1996, an estimated 373,000 Newfoundland and Labrador residents (82.7 per cent of the population aged fifteen years and over) participated in a wide range of nature-related activities, including swimming, sightseeing, camping, hiking, hunting, fishing, and berry picking. An estimated 206,000 residents participated in outdoor activities in natural areas. Wildlife viewing attracted 78,000 participants, fishing 138,000, and hunting 68,000. The total amount of expenditures associated with these outdoor activities was almost \$200 million.

Figure 6.11: Participation in Outdoor Activities in Newfoundland and Labrador, 1996.

	Outdoor Activities in Natural Areas	Wildlife Viewing	Recreational Fishing	Hunting	
Total Number of Participants	206,000	78,000	138,000	68,000	
Participation Rate	45.6%	17.3%	30.6%	15.1%	
Days					
Total Days	3,939,000	1,584,000	3,000,000	2,000,000	
Average Days per Participant	19.1	20.3	24.2	23.1	
Trips					
Total Trips	3,567,000	1,263,000	3,000,000	1,000,000	
Average Trips per Participant	17.3	16.2	19.6	19.3	

Grand Totals: 373,000 participants • 31.7 million days • 6.2 million trips

Source: Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians. (1999)

Consumptive and Non-consumptive Outdoor Activities

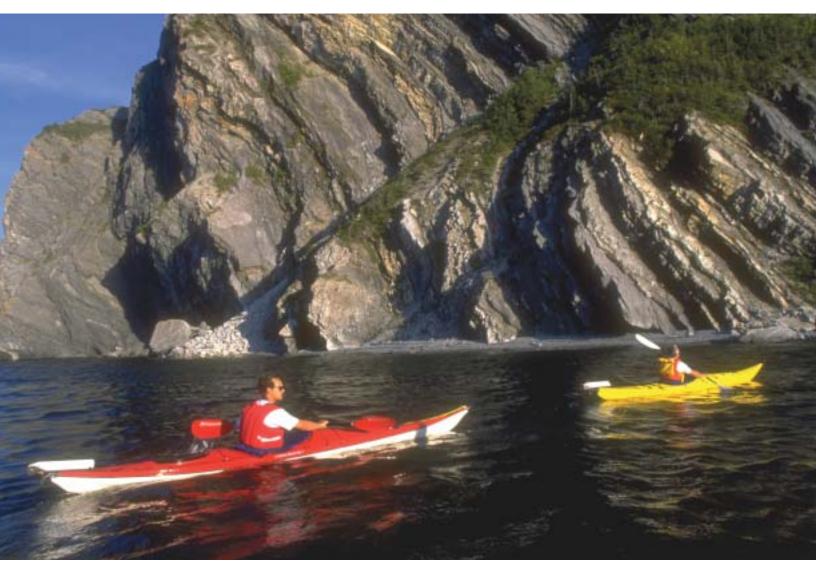


Figure 6.12: Sea kayakers explore the coastline. *Photo courtesy Parks Canada / Barrett and Mackay*

Outdoor activities can be divided into two categories: consumptive and non-consumptive. Hunting, fishing, berry picking, and cutting firewood are consumptive activities because they extract resources from the environment. Non-consumptive activities do not take anything from the environment. Examples of non-consumptive activities include photography, hiking, and sea kayaking.

Consumptive and non-consumptive activities are equally important to outdoor life Newfoundland and Labrador, and participants in both share a love of the outdoors and natural environments.

Local Participation Rates in Outdoor Activities

Background

In this activity you will survey a segment of the population in your community to find out levels of participation in nature-related activities, and compare your results with both Canadian averages and results collected by students in another Newfoundland and Labrador location.

Purpose

To survey your community to determine the extent of nature-related activities.

Procedure

With the help of your teacher and the following guidelines, design and distribute a questionnaire that will measure the participation in nature-related activities in your community.

- 1. Use simple yes/no questions and keep the questionnaire brief.
 - Design the first questions to collect demographic information about your survey group (the age, sex, employment status, etc., of respondents).
 - Choose a focus for your main question(s).
 - Develop your questions so you will be able to compare your results with those of Canadians in 1996 (See Figure 6.13).
 - You should include a question that will determine the frequency that respondents engage in outdoor activities.
- Determine the population group(s) you wish to sample.
 (Remember that your choices here can influence the results of your survey.) Sample groups could be students and/or adults.
- 3. Determine the sample size. A sample size of 30 will generally yield excellent results if the sample is chosen randomly. A smaller sample will still give you a good idea of people's activities. Your teacher will help you determine the optimum sample size.
- 4. Choose your sample group (draw names, use a phone book, etc.).
- 5. Remember the following as you conduct your survey:
 - 1. Be polite and courteous.
 - 2. Explain who you are and why you are conducting the survey.
 - 3. Do not force the issue if someone does not wish to participate. Just move on to another person.

Analyze and Conclude

- 1. When analyzing the results of the survey, focus on the responses of the entire sample group first, then look at the relationships to age, sex, etc. If you are familiar with statistics, apply what you have learned to the data you have collected.
- 2. Use a spreadsheet to tabulate data; then produce graphs and tables.
- 3. Discuss such questions as:
 - What do the survey results show?
 - Did the survey answer the question(s) you designed it to answer?
 - Do you have other questions as a result of conducting this survey?
 - How do your community's outdoor-activity participation rates compare to the rest of Canada (see the table below).
- 4. Contact another school (rural if you're urban, urban if you're rural) and exchange and compare results.

Activity	National Rate %
Relaxing in an outdoor setting	32.4
Sightseeing in natural areas	31.1
Picnicking	26.0
Swimming/beach activity	23.7
Camping	18.8
Hiking/backpacking	18.5
Photographing in natural areas	15.9
Gathering nuts, berries, firewood	11.0
Hunting	10.6
Canoeing/kayaking/sailing	9.9
Fishing	9.8
Power boating	9.3
Cycling in natural areas	8.6
Downhill skiing	4.7
Rock climbing	4.3
Cross-country skiing/snowshoeing	3.5
Off-road vehicle use	3.4
Snowmobiling	2.5
Horseback riding	1.6

Becoming an Outdoors-woman

Women of Newfoundland and Labrador have a unique opportunity to learn about outdoor recreational opportunities through the "Becoming an Outdoors-Woman" workshop, which is offered annually at selected

sites across the province. The program is designed to



give women an opportunity to learn **utdoors**- or improve the skills they need to Woman participate in fishing, hunting, and other forms of outdoor recreation.

It teaches skills needed for canoeing, kayaking, using rifles and shotguns, archery, outdoor survival, using a map and compass, birding, and fishing, and also discusses spirituality and nature.

Source: Department of Environment and Conservation

Figure 6.13:

Participation Rates in Nature-Related Recreational Activities (All of Canada, 1996).

Source: Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians (1999)

Managing Outdoor Recreational Activities

Outdoor recreational activities have an impact on our environment and add to the economy, just as larger-scale industrial activities such as logging, hydroelectric development, and mining do. As discussed earlier, outdoor recreational activities are important to people living in Newfoundland and Labrador, providing personal enjoyment, connecting us to our culture and natural landscapes, and generating income. Depending on the type of activity and the number of and types of participants, however, they can also have a considerable impact on the environment. In addition, conflicts can arise among people who wish to use a wilderness area for different types of recreational—or commercial—activities. Conflicting values and uses make managing outdoor recreational activities very complex.

Managing recreational activities involves both scientifically assessing direct environmental impacts and gauging the values of both the participants and the people affected by the activity. Conflicts can arise among various groups of people ("stakeholders"). Managing recreational activities includes the challenge of balancing such values as:

- development and/or access / preservation
- increased activity / possibilities for solitude
- commercial use / personal use
- motorized access/ non-motorized access
- consumptive activities/ non-consumptive activities

Assessing and managing the issues requires an unbiased approach. To help you see all sides of the issues, consider the range of values involved, and suggest solutions that could satisfy both environmental concerns and those of a variety of stakeholders, you'll need to ask certain several questions:

1. What are the effects of this activity on the environment?

To what extent could the activity (and related infrastructure and facilities) affect key ecosystems?

- Consider the level and intensity of wilderness use, the type of access
 the activity requires (motorized or non-motorized), the extent of
 infrastructure needed, associated facilities, emerging trends, associated
 technology and pollution, impact on species at risk, any addition to the
 human footprint, etc.
- Is there potential for adverse cumulative effects? (Example: More hikers using a trail increases the loss of vegetation).
- What action could minimize or mitigate potential adverse impacts?
 (Example: The use of cleaner-running engines in snowmobiles may minimize the air pollution they cause.)
- Could the proposed activity damage or destroy valued natural resources in ways that cannot be mitigated?



Figure 6.14: Marram Grass along Newman Sound. *Photo courtesy Parks Canada*

Ecological Integrity: National Parks Preserving Wilderness

Canada's national parks protect examples of our natural landscape. To many people this implies that parks protect wilderness. Because the perception of "wilderness" varies from person to person, from generation to generation, and culture to culture, it is impossible to manage a national park to match the whole range of ideas about what should be protected. Instead, Parks Canada manages national parks based on ensuring "ecological integrity."

According to the *Canada National Parks Act*—the law governing national parks in Canada—"ecological integrity" means, with respect to a park, "... a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes."

In plain language, ecosystems are considered to have integrity when their native natural components are intact, including: abiotic components (physical elements such as water and rocks), biodiversity (the composition and abundance of species and communities in an ecosystem—tundra, rainforest, and grasslands would represent landscape diversity; the presence of black bears, brook trout, and black spruce could represent species diversity), and ecosystem processes (the engines that makes an ecosystem work, such as fire, flooding, and predation).

Source: Parks Canada

- Can the proposed activity be managed so that it does not adversely affect the environment, unique natural features, or plants and animals?
- Do we know enough about how this activity affects the environment to assess sustainability?

2. What is the scale of the activity?

Will many people be participating in it? To assess how much effect each participant has on the environment, determine:

- Do trend data indicate a long-term demand for this activity? How many people will likely participate in the future?
- Is the activity restricted to personal use or is there also a commercial market?

3. Will allowing the activity cause conflict?

• Does this activity adversely affect the experience that other people are seeking? (Example: Do the dust and noise caused by ATV use interfere with hikers sharing the same trail?)

4. Will the activity evoke stewardship behaviour and valuing of the environment?

- Does participating in the activity help to create a "sense of place" in people and encourage their stewardship of the environment?
- Does the activity provide people with opportunities to experience the uniqueness of the environment, or to experience the outdoors in a unique way?

5. What are the benefits of allowing this activity?

- Does the activity offer cultural benefits to local communities?
- Does the activity contribute to the regional economy in a long-term, sustainable way?
- Are there environmental or social benefits for local communities associated with this activity?
- Would the activity be considered acceptable in the context of local culture?

These are the types of questions you should ask to evaluate the impact of a recreational activity on both the environment and on the people who live in it. Can you suggest other questions that will help you fully evaluate the impact of an outdoor recreational activity?



Figure 6.15: A whale surfaces off the east coast of Newfoundland. *Photo courtesy O'Briens Whale and Boat Tour*

TOURISM AND THE ENVIRONMENT

Tourism is the practice of travelling for pleasure. Providing tours and tourism services has a tremendous economic impact both locally and globally. In fact, tourism is among the world's fastest-growing and largest industries. The World Tourism Organization estimates that there were more than 898 million international travellers globally in 2007. Spending by these tourists was estimated at more than \$733 billion (CAN). Globally, tourist travel is predicted to grow by an average 4.1% a year over the next two decades. It is expected that there will be a total of 1.0 billion international travellers by 2010, and 1.6 billion by 2020. Tourism is the world's largest employer, generating—directly and indirectly—nearly 200 million jobs (ten per cent of all jobs).

Tourism is a growing industry in Newfoundland and Labrador—it increased by thirty-seven per cent from 2001 to 2006, for example—and the province has great potential for further tourism development. Our unique cultures, diversity of landscapes, wilderness areas—and Labrador's remoteness—offer many opportunities for the development of the sector. Access to clean, undisturbed environments and respect for our culture must be maintained, however, if we are to take advantage of them.

At the same time, concern is growing that increased tourism could cause serious environmental and cultural damage. This is because the presence of visitors also increases the amount of:

- garbage
- sewage
- development
- traffic and wear on trails and country roads (more people, more weight)
- fuel consumption
- wildlife harvesting

The loss of biodiversity, the overuse of land and resources, and the increased demands on vegetation, on wildlife, on mountain, marine, and coastal environments, and on water resources can all degrade what attracted tourists to the province in the first place.



Figure 6.16: Tourists enjoying an up close view of an iceberg near Witless Bay. Photo courtesy Department of Environment and Conservation/Holly Hogan

Did You Know?

Some people argue that "ecotourism" is an oxymoron: tourists who are supposedly sensitive to environmental concerns travel to ecotourism destinations on jet planes that contribute significantly to the climate change.

SUSTAINABLE TOURISM

When developed responsibly, tourism can benefit both the economy and the environment. This is called "sustainable tourism." Sustainable tourism is responsible tourism—it is both ecologically and culturally sensitive. It aims to have a low impact on the environment and local culture, while helping to generate income and employment.

Sustainable tourism attempts to make the best use of environmental resources while also preserving local ecosystems, maintaining essential ecological processes, and helping to preserve natural resources and biodiversity. It respects the socio-cultural authenticity of host communities, helps preserves their built and living cultural heritage and traditional values, and contributes to inter-cultural understanding and tolerance. And, finally, sustainable tourism ensures viable, long-term economic operations such as stable employment, income-earning opportunities, and social services, which provide socio-economic benefits to all stakeholders.

Sustainable tourism is a valuable approach to both conservation and tourism because it:

- · gives protected areas an economic value
- generates direct income for the conservation of protected areas
- generates direct and indirect income for local people, which also creates incentives for conservation locally and internationally
- promotes sustainable use of natural resources
- promotes wise and responsible use (conservation) of natural areas
- reduces threats to biodiversity by increasing the importance of plants and wildlife as a tourism draw

Did You Know?

Some ecotourism activities that may seem harmless actually can affect wildlife negatively. For example, repeated sea kayaking trips into remote bays and coves may inadvertently cause chronic disturbance of species. The planned expansion of **La Route bleue de la Gaspésie** in Québec, for example, will allow boaters alongside a known harlequin duck staging and moulting area.

Ecotourism



Figure 6.17: Newfoundland and Labrador has a growing ecotourism sector. *Photo courtesy Department of Environment and Conservation/Holly Hogan*

One branch of sustainable tourism is ecotourism. The International Ecotourism Society defines ecotourism as responsible travel to natural areas (where plants, animals, and cultural heritage are the primary attractions) that conserves the environment and improves the welfare of local people.

Ecotourism is travel that is linked to a region's biodiversity, landscape, and culture. The World Tourism Organization expects that by 2010 there will be seventy million ecotourist visits globally. Most ecotourists are expected to visit national parks and protected areas.

In 2002, more than a thousand participants from 132 countries attended the World Ecotourism Summit in Quebec City. The main outcome of the Summit was

the "Québec Declaration on Ecotourism," which states that ecotourism can be distinguished from the larger category of sustainable tourism because it:

- contributes actively to the conservation of natural and cultural heritage
- includes local and indigenous communities in its planning, development, and operation, and contributes to their well-being
- interprets the natural and cultural heritage of the destination to visitors
- lends itself better to independent travellers, as well as to organized tours for small groups

The Declaration outlined forty-nine general guidelines for the sustainable development of ecotourism. These guidelines will set the direction of ecotourism for the future and, if followed, will ensure that the effects of ecotourism on the environment and on culture are kept to a minimum.

Because tourism is a significant contributor to Newfoundland and Labrador's economy, it is important to protect the quality of the tourism product on offer, and enrich and improve sustainable tourism opportunities. The Gros Morne Institute for Sustainable Tourism was established to provide developmental training programs to enhance the quality and sustainability of tourism practices and services in the area of Gros Morne National Park.

Gros Morne Institute for Sustainable Tourism (GMIST)



The Gros Morne Institute for Sustainable Tourism (or GMIST) was established in 2004. It is a partnership effort of Hospitality Newfoundland and Labrador, the Atlantic Canada Opportunities Agency, Tourism Atlantic, the Canadian Tourism Commission, and Parks Canada. The objective of GMIST is to enhance the quality and sustainability of the outdoor and naturebased tourism experiences offered throughout Atlantic Canada by providing training programs for people who provide sustainable tourism practices, experiential tourism services, and eco-adventure tourism.

Source: Gros Morne Institute for Sustainable Tourism

Principles of Sustainable Tourism

Figure 6.18: Visitors to

Gros Morne National Park participate in an interpretation

session on the Tablelands.

Photo courtesy Parks Canada

- Reduce negative impacts on nature and culture
- Educate travellers about the importance of conservation
- Bring direct revenue to the conservation and management of natural and protected areas
- Emphasize the use of environmental and social baseline studies, as well as long-term monitoring programs, to assess and reduce impact of tourism activities
- Maximize economic benefit for citizens of the host country, particularly those living in and next to natural protected areas
- Ensure that tourism development does not exceed environmental limits
- Rely on buildings that are developed in harmony with the environment, and that minimize the use of fossil fuels, conserve local plants and wildlife, and blend with the

natural and cultural environment

Source: Department of Environment and Conservation



ENVIRO-FOCUS

Monitoring the Effects of Ecotourism at the Witless Bay Ecological Reserve

The Witless Bay Seabird Ecological Reserve, southeast of St. John's, protects significant breeding habitat for several seabird species.

Figure 6.19: A tour boat, with its engines disengaged, is approached by a humpback whale. Regulations in the Witless Bay Ecological Reserve prohibit boats from "harassing" whales by following them, but they are free to stop and watch when the giant mammals approach them. Photo courtesy Department of Environment and Conservation/ Holly Hogan

The islands host the largest Atlantic puffin colony in North America (with more than 260,000 pairs) and the second largest Leach's storm-petrel colony in the world (more than 600,000 pairs), for example. Three of the Witless Bay islands were included when the original bird sanctuary was created in 1964. In 1983, this protection was extended to include a fourth island and designation as an ecological reserve under the province's Wilderness and Ecological Reserves Act.

As with other seabird reserves in the province, human activity is restricted on the islands-the best way for people to view the birds is by water. The first tour-boat operations (a single vessel) started up in 1984. Today, the Parks and Natural Areas Division issues up to ten tour-boat permits, and the area has

> become one of eastern Newfoundland's most popular ecotourism destinations. To protect the birds from disturbance, tour-boat activity in the reserve's marine areas is restricted to only these licenced tourboat operators.



Figure 6.20: The Atlantic Puffin is one of the most popular and well-known seabirds in Canada.

The "Tour Boat Operator's Licence Policy" provides for the protection and safety of seabirds, whales, and also visitors. It sets the limit on the number and size of tour boats. Seabird behaviour and populations are monitored in collaboration with Memorial University and the Canadian

Wildlife Service to ensure that the tour-boat activities do not pose a risk to seabird populations. The birds' status and population trends also guide occasional revisions of the Licence Policy. In addition, a Parks and Natural Areas reserve manager works to ensure that seabird populations are healthy, and that policy and regulations are followed-and work.

Surveys indicate that most of the islands' seabird populations are currently stable or increasing (largely due to a change in fishing activities in the area, which has reduced bird mortality in fishing nets). This status bodes well for sustainable ecotourism in the area, and also spin-off activities such as shops and restaurants, which make an important contribution to the local economy.



- Define ecotourism and give two examples of companies and/or schools offering ecotourism opportunities and education programs in Newfoundland and Labrador.
- 2. List the principles of ecotourism that relate to the environment.
- 3. Explain how the loss of biodiversity in a region might affect ecotourism.

For Further Discussion and/or Research

- 4. Invite a representative from a company that offers an ecotourism product, such as sea kayaking or backpacking trips, to visit your class. Ask her or him to speak about how the company incorporates conservation education into its program, and the steps it takes to reduce visitor impact on the environment.
- 5. The Québec Declaration on Ecotourism is available on the Internet. Review the Declaration and briefly outline the recommendations that relate to the environment.
- 6. Through research on the Internet, find a company that offers an ecotourism product in a developing country. What is its product? What components of the natural environment does its product depend on? Email the company, explain that you are high school student doing an environmental science course, and ask them if they would share some information about the steps the company takes to reduce the environmental impact of its activities and to ensure that residents benefit from its activities, as well.

Evaluating the Impact of Recreational Activities on a National Park

Canada's national parks are areas set aside to protect and present nationally significant examples of the country's natural heritage. They provide opportunities to foster public understanding, appreciation, and enjoyment of nature. These opportunities usually involve outdoor recreation of some kind: hiking, sightseeing, mountain biking, snowmobiling, or camping. No matter what the activity, it must not affect the national park's ecological integrity.

Assessing a recreational activity's impact is the first step in managing its effect on the environment and understanding how it affects a visitor's experience in the park. Take, for example, the impact of hikers on the plants and wildlife of Gros Morne Mountain (described in Unit One)—an activity that is closely managed because of the potential effects on the environment.





Figure 6.21: Western Brook Pond, Gros Morne National Park. Photo courtesy Wikipedia.org

Activity:

Read the *Gros Morne Mountain Trail Guide* and review the following:

Recreational Activities Assessment Framework for National Parks

1. Sustain or enhance the character of the place

• The activity is consistent with Canadians' aspirations for our country's system of national heritage places, and with the vision for the place expressed in the park's management plan. The activity evokes inspiration and emotion that results in enhanced value of, and respect for, the place.

2. Respect natural and cultural resources

• Visitors who participate in the activity can do so in ways that respect natural and cultural resources. Activities that have an unacceptable impact will not be supported. Parks Canada will maintain a program of monitoring, adaptive management, and ongoing dialogue with visitors, stakeholders, and partners.

3. Facilitate opportunities for outstanding visitor experiences

• The activity provides opportunities for outstanding visitor experiences. It responds to the needs and interests of identified audiences and may provide visitors with a sense of personal growth and accomplishment. Parks Canada will facilitate opportunities for visitors to have unique, safe, stimulating, and memorable experiences.

4. Promote public understanding and appreciation

 Participation in the activity provides opportunities to enrich understanding and appreciation of the place. Participation in the activity may foster support of and involvement in the stewardship of national parks, national historic sites, and national marine conservation areas.

5. Value and involve local communities

 Management of the activity creates opportunities for shared leadership with and the active involvement of the local community while respecting the rights and values of Aboriginal peoples and the interests and values of stakeholders.

Analyze and Conclude

- 1. Identify steps that the national park is taking to protect the environment of Gros Morne Mountain and the experience visitors have when they hike the trail.
- 2. What impact might these management measures have on the local tourism industry?
- 3. Do you agree with the management measures taken to protect this environment? Can you identify additional ways this environment could be protected?
- 4. Imagine that the number of hikers on Gros Morne Mountain increases from 6,000 to 60,000. Do you think additional management measures would need to be put in place to protect this environment and its wildlife? What would these measures be? Would they change the visitor experience and affect opportunities for enjoyment, understanding, and appreciation of the natural environment?
- 5. Research other recreational activities in a national park. Identify how these are managed to protect the national park's ecological integrity while providing opportunities for enjoyment, understanding, and appreciation of the natural environment.
- 6. If there is a walking trail in your community, design a brochure that could be distributed to hikers at the trailhead.