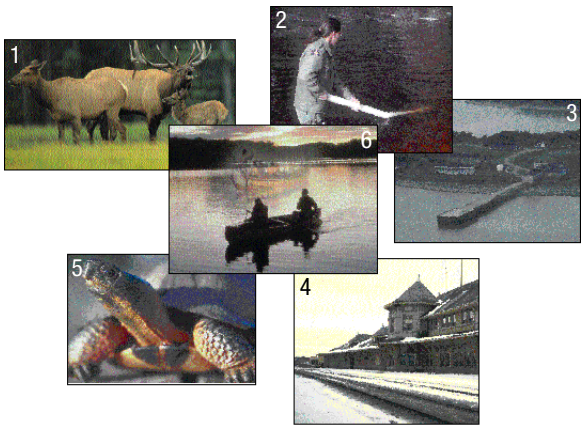
PARKS CANADA AGENCY

State of Protected Heritage Areas
1999 Report

Parks Canada Parcs Canada

Canada



Identification of images on the front cover photo montage:

1.A herd of elk

2.Louis Nabigon,Aboriginal park warden,working on an aquatics program in Pukaskwa National Park of Canada

3.Grosse - Île and the Irish Memorial,a national historic site administered by Parks Canada

4.Saskatoon Railway Station,a federal heritage railway station

5. Wood turtle at La Mauricie National Park of Canada

6. Parks Canada Awareness Inititative 1999

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TABLE OF CONTENTS

MINISTER'S MESSAGE

It is with satisfaction, but also with increasing concern that I present this report on the state of Canada's Protected Heritage Areas to the Parliament of Canada.

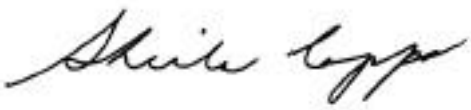
I am pleased that our national parks and national historic sites are ranked by Canadians amongst the highest symbols of our nation. This interest is reflected in the 2 million visitors to the Parks Canada website in the past year and the 14 million pages of information they examined in their exploration for knowledge and understanding of Canada.

I am particularly proud of our achievement in creating three new national parks, the commemoration during this period of more than 100 people, places and events recognized as having special historical or cultural significance to Canadians and our expanded efforts to incorporate Aboriginal values, history and communities into our initiatives.

At the same time, it is with deepening concern that I report to Parliament that the national parks of Canada face increasingly serious ecosystem conservation issues. This 1999 Report confirms conditions reported in the previous reports to Parliament in 1994 and 1997 and adds to the concerns expressed in the report of the Panel on the Ecological Integrity of Canada's National Parks, in March 2000.

Our national parks, dedicated to the protection of their natural environments and containing many of the plant and animal species designated as being at risk in Canada, need help. This report indicates that an estimated 50% of the top five stresses on these natural systems are increasing, and that the very values these special places were established to protect are in danger.

I call upon all Canadians and especially you, my fellow Parliamentarians, to engage in and support our efforts to reverse the damage that is occurring to our national parks, and to ensure that these special places remain available to serve the purposes to which they are dedicated: the benefit, education and enjoyment of the people of Canada.



Sheila Copps
Minister of Canadian Heritage

EXECUTIVE SUMMARY

The two years since the *State of the Parks 1997 Report* have been a time of solid achievement — and keen assessment.

Three major pieces of legislation have been presented to Parliament: the *Parks Canada Agency Act (1998)*, a proposed new *Canada National Parks Act*, and a proposed *Marine Conservation Areas Act*. They should have a profoundly positive effect on the way in which Canadians preserve and restore their protected heritage areas. The P*arks Canada Agency Act* has given Parks Canada the tools and flexibility it needs for the effective contemporary stewardship of our system of special heritage places. The *Canada National Parks Act* places ecological integrity at the core of Parks Canada's activities. The *Marine Conservation Areas Act* will set the stage for a new era of conservation as we commence the new millennium.

Within the time period covered by this report, a distinguished independent Panel on the Ecological Integrity of Canada's National Parks was convened by the Minister of Canadian Heritage, and issued its findings and recommendations. The Panel's report was a comprehensive and frank assessment of the ecological condition of Canada's national parks and protected areas, and its more than 120 recommendations will have a profound effect in shaping our future direction.

This report confirms the concerns reflected by the Panel on Ecological Integrity — that stresses on the natural process in national parks continue to grow. Stresses were reported in our previous reports to Parliament in 1994 and 1997.This 1999 report indicates that of the top five stresses, an estimated 50% are believed to be increasing, while only 5% are decreasing.

Another significant endeavour covered by this report is the sincere effort being made by the Parks Canada Agency to forge stronger relationships and enhance cooperation with Aboriginal peoples. A new Parks Canada Aboriginal Affairs Secretariat has been established to serve as a focal point in the development of two-way communication with Aboriginal peoples, whose special knowledge and experience of natural and cultural heritage are indispensable.

Significant progress has also been made in building our systems of national parks, national historic sites and other protected areas. Three new national parks and national park reserves have been established (Sirmilik, Quttinirpaaq and Auyuittuq) under an agreement which ensures the participation of Inuit communities in their planning and management. Altogether, since 1997, there has been an increase of 22, 257 square kilometres in the size of Canada's system of national parks and marine conservation areas. Nine new Canadian heritage rivers have also been designated since the last report, bringing the total of rivers in the system to 35. The Canadian Heritage Rivers System is now the fastest-growing river conservation program in the world.

Our system of national historic sites has also grown. Since 1997, more than 100 people, places and events have been designated as having special historic or cultural significance to Canadians. Of these, some 50 fall under the strategic priority of better representation for women, Aboriginal people and ethnocultural communities. A special initiative has included the commemoration and conservation of the grave sites of our nation's prime ministers.

The period covered by this report saw a substantive enhancement in communicating the messages and values of national parks and national historic sites to Canadians. Of special note are the almost 2 million people who browsed some 14 million pages of information on these special places at the Parks Canada website.

Tom Lee
Chief Executive Officer
Parks Canada Agency

INTRODUCTION

THE *STATE OF PROTECTED HERITAGE AREAS 1999 REPORT* FOCUSES ON THE TWO YEARS SINCE THE *STATE OF THE PARKS 1997* REPORT. THESE YEARS HAVE BEEN A TIME OF SOME PROGRESS AT PARKS CANADA. ONE OF THE MOST IMPORTANT EVENTS WAS THE PASSAGE IN PARLIAMENT OF BILL C-29, THE *PARKS CANADA AGENCY ACT*, IN DECEMBER 1998, WHICH CREATED THE NEW AGENCY.

The Parks Canada Agency

Under the legislation, Parks Canada continues to work toward the completion of the national parks of Canada system, the enhancement of the systems of national historic sites and national marine conservation areas, and the protection and presentation of existing parks and sites. The act provides for new administrative tools to carry out this mandate. These include two-year rolling budgets along with a new human resources framework.

A Public Entity: Stewardship and Accountability

Consultations showed that Canadians wanted both responsible stewardship and public accountability from Parks Canada. The new act explicitly establishes both requirements in law.

Stewardship: Parks Canada continues to implement government policy on national parks, national historic sites and other protected heritage areas, as well as heritage protection programs. The agency is also responsible for negotiating and recommending to the Minister on the establishment and acquisition of new heritage places.

For the first time, Parks Canada is required to "ensure there are long-term plans in place for establishing systems of national parks, national historic sites and marine conservation areas." In addition, management plans have been prepared, or are in the process of preparation, for every heritage place under the responsibility of Parks Canada. The current report updates the 1997 figures and reports on progress achieved in management planning.

Accountability: The act sets out specific reporting requirements. One stipulates that the Chief Executive Officer is to provide the Minister with a report every two years on the state of the natural and historic heritage places and on the performance of the agency's responsibilities under the act. The 1999 report has been prepared in response to that requirement for the first time.

Cooperation with Aboriginal Peoples

The Parks Canada Agency is committed to working with the Aboriginal Peoples of Canada in the preservation and management of national heritage places. To highlight this commitment, this report begins with an article by an Ojibway freelance writer who relates his impressions of the evolution of the relationship between Parks Canada and First Nations at a number of national parks and national historic sites across Canada. Included are examples where the Aboriginal Peoples' special knowledge of their natural and cultural heritage and their authenticity in heritage presentation have resulted in unique and effective collaboration with the agency.

Progress in Ecological and Commemorative Integrity

Parks Canada continues to focus on maintaining the ecological integrity of our national parks, and the commemorative integrity of our national historic sites. These concepts were first defined for the 1994 report and now are used as the basis for establishing the state of the heritage areas. They are reported on in the first two chapters.

In Chapter 1, the reporting framework first presented in the 1997 report is used again to maintain continuity of reporting *ecological integrity* under headings of *biodiversity, ecosystem functions* and *stressors*. Progress in each area is described and each is illustrated liberally with case studies. Chapter 2 reports on the *commemorative integrity* of our national historic sites, notably with the detailed report on 12 selected sites, that is, four more than the eight outlined in the table in the 1997 report.

The recently released report (March 23, 2000) of the Panel on Ecological Integrity of Canada's National Parks will provide new strength to the agency's efforts to protect ecological integrity and will form part of future reports.

Engaging Canadians

Chapter 3 reports on the special efforts made by Parks Canada to raise awareness among Canadians of the value and benefits to them of the systems of heritage places in order to ensure the long-term ecological and commemorative integrity of these places. The past two years have seen a number of such efforts, some of which have involved collaboration with the tourism industry, the education sector and other stakeholders.

Progress Reports since the 1994 Report

In addition to the updated report on heritage rivers in Chapter 1, the *State of Protected Heritage Areas 1999 Report* files an update on the federal heritage railway stations and federal heritage buildings for the first time since 1994. These were not reported on in the 1997 report.

This first *State of Protected Heritage Areas Report* is a progress report on the way Parks Canada continues to serve Canadians, balancing its concurrent responsibilities to protect the heritage places while managing their discovery, enjoyment and appreciation by Canadians. It is presented to all Canadians as well as Members of Parliament and the international community to highlight progress throughout the Parks Canada systems, and the agency's ongoing efforts to monitor and preserve the integrity of this precious heritage for future generations.

WORKING WITH ABORIGINAL PEOPLES

Invariably, the national parks and national historic sites of Canada are about people – users, visitors, scientists, service providers, stakeholders, on-site interpreters, staff, management, historical figures and cultural groups. Today Parks Canada and Aboriginal Peoples are working together on projects that include comanagement of natural and cultural resources, equity employment and interpretive programs offered under Aboriginal leadership. The common denominator is their shared interest in the ecological integrity of the national parks of Canada and the commemorative integrity of the national historic sites of Canada from coast to coast.

Aboriginal Peoples have not had a strong voice, historically, where national parks and national historic sites are concerned. As a result, opportunities connected to operations have been elusive for them. However, because parks, sites and canals have been important to the Aboriginal Peoples, Parks Canada has been working closely with them and making up for lost time with some significant results. Still, challenges remain.

Pukaskwa

Set in the heart of the Canadian Shield, Pukaskwa's 120 kilometers of Lake Superior shoreline offer the scenery that captured the hearts of the Group of Seven. The park is situated only a few minutes' drive from the Ojibways of Pic River First Nation Territory, and has offered opportunities to them and to the Robinson Superior Treaty First Nations from the day it was established.

These treaty nations have clearly defined roles in park management and direction, although there is much to achieve if they are to reach their goals for Pukaskwa. In partnership with Parks Canada, the Robinson Superior Treaty First Nations have made significant inroads toward new opportunities, while taking advantage of existing ones. For example, Aboriginal people staff 50 percent of positions at the park – the halfway point to one of their goals.

Louis Nabigon,Aboriginal park warden,working on an aquatics program in Pukaskwa National Park of Canada

"We insisted that positions be designated exclusively for people of the Robinson Superior Treaty. Most of the wardens at Pukaskwa are Aboriginal," says Roy Michano, Chief of the Ojibways of Pic River First Nation.

Pukaskwa Superintendent Sharon Otiquam, herself a member of the Ojibways of Pic River First Nation, believes a more broad-based approach from a national perspective should replace the current site-by-site effort if First Nations are to benefit from what she feels is largely an untapped potential.

She says Aboriginal people may not know certain opportunities exist and that Parks Canada should be prepared to take the initiative and invite them into the circle. Otiquam says places like Pukaskwa can teach a good deal about how business can be done with First Nations.

"If First Nations treaty rights and Aboriginal rights are to be truly recognized, there should be changes in the way the parks are operated," says Chief Michano. "We have expertise now, we have people who know the system, and we know how to take care of these special places...we know how to take care of what the Creator has given us."

"Twenty years ago, the economic opportunities the First Nations saw were completely different from those of today," says Otiquam. They now include protection of the environment: for example, plans to build an onsite hotel at Pukakswa were dropped. Instead, the 18,000 annual visitors come for a wilderness experience that also offers facilities like washrooms and showers.

Although some ideas have not been developed, others, like cultural presentations, have succeeded. "The overall goal of the presentation program is to relate the Aboriginal history of the area, the cultural as well as a spiritual component," says Dan Couchie, Manager of Heritage Protection and Presentation and another Ojibways of Pic River First Nation member.

Couchie was instrumental in developing the First Nations Warden Training Program at Pukaskwa, which offers meaningful employment while providing an incentive for continued education. "Most recruits didn't finish high school, while a full-fledged park warden requires at least two years' study in natural science either in a college diploma program or at a university," he says. To take a position in the program and get on-the-job experience, recruits must continue their education. In the near future, Parks Canada will be promoting the Park Officer Training Program, which is based on the work done at Pukaskwa, as well as other parks.

Gwaii Haanas

An unprecedented co-operative accomplishment, the Gwaii Haanas Agreement sprang from a tense situation. The Gwaii Haanas National Park Reserve encompasses the southern part of the Queen Charlotte Islands. It is an area rich in Haida history, teeming with wildlife, ecologically unique and dramatically picturesque.

In the mid-1980s, the Haida wanted the area protected from the clearcutting going on there. Working with environmental groups, the Haida succeeded in 1987 in having the federal and provincial governments commit to establish a national park reserve in the area, which is subject to a land claim by the Haida. Despite this, the Haida and Parks Canada were able to reach a mutually beneficial agreement to manage the area cooperatively without addressing the question of land title.

"We look at that area as a source of culture, a source of food, and a place where the people have an opportunity to connect with the unspoiled earth, not as a place where picnic benches are the norm," Guujaaw, President of the Council of the Haida Nation and former co-chair of the Gwaii Haanas Archipelago Management Board says. "The priority is for the well-being of the land. The overall goal is that in 20, 50, or even 200 years, someone could go down and enjoy the land as we see it today."

Although the fledgling partnership that sprang from the Gwaii Haanas Agreement did not immediately win the support of all Haida people, there were several turning points that increased public support

among the Haida community. In one instance, human skeletal remains were found while construction of a visitor information center was in progress: work was halted while elders and community leaders were consulted. The Haida leaders told Parks Canada work could resume if they held a special ceremony for the disturbed burial site. This became the first ever federally hosted potlatch. The event demonstrated that Parks Canada was serious in its goals of meaningful partnership while fulfilling the objectives of the agreement. "To see Parks Canada showing this kind of respect not only got us a lot of credibility in the Haida community, it was also a morale-builder for the entire Parks Canada staff at Gwaii Haanas," says Ernie Gladstone, himself a member of the Haida Nation and acting Gwaii Haanas Superintendent.

Fifty percent of the staff at Gwaii Haanas are Haida people. They work in a variety of positions at the park and keep the Haida people informed about park operations and how the obligations under the agreement are being fulfilled. "We've taken a lot of steps in the past, and in particular over the past five years, to ensure that the people have a comprehensive understanding of what the agreement means and entails," says Gladstone.

"Both parties bring a combination of resources and skills to the table that carry much more weight than each party would if they were to manage the Gwaii Haanas area independently," says Gladstone. "The Haida bring an established presence as well as knowledge of Gwaii Haanas and Haida culture that has been gained through many generations of living and traveling in Haida Gwaii. Parks Canada brings resources, skills, experience and knowledge gained through years of managing other protected areas."

"The Gwaii Haanas Agreement is referred to both nationally and internationally as an innovative co-operative agreement for protected areas in Canada," he says. "It has set the stage for the negotiation and establishment of future protected areas which include involvement and cooperation with Aboriginal peoples. The agreement focuses on reaching a common ground, while at the same time respecting diverging viewpoints."

Parks staff visiting Haida Gwaii watchmen in Gwaii Haanas National Park of Canada

Fort Témiscamingue

Fort Témiscamingue, located in northwestern Quebec, is a national historic site in a state of change. The early fur-trade site has been closed for two operational seasons while Timiskaming First Nation and the federal government work toward a solution to the First Nation's issues.

The fort is the principal tourist attraction in the area: all nearby communities share a keen interest in its operations. Local businesses from the Ville Marie area raised $500,000 for site improvements. "There are some different views but everyone shares a common interest in the site," says Claude Filion, Field Unit Superintendent for Parks Canada.

Parks Canada hopes a cooperative management board can be created that will bring appropriate players into the forum. "We've all agreed that we have to work together in presentation and development of the site and we share the goal of finding a balance that will be fair to everyone," says Filion.

"I don't see it as a tripartite agreement. I see it as being between us and Parks Canada," says Allan McLaren, who is responsible for the Land Rights for the Algonquin Nations Secretariat,"And having spoken to the secretary for the municipalities, I know they would be satisfied that the fort be open and attracting tourists to the area." He adds that

the Algonquin have not ruled out including other interests to consider issues such as continued development of the site and joint-venture possibilities.

The Algonquin say the site will improve with an increased Aboriginal presence both in operations and delivery of activities such as canoe-building. "We're going to have to have a strong voice in the upper echelons of management. We can coexist, but we'd like to see more… of our culture, traditions and spirituality represented," says McLaren.

Parks Canada's Aboriginal Secretariat

Efforts to assist in the realization of Aboriginal aspirations are not restricted to national parks and national historic sites of Canada. As part of the federal government's commitment in volume 3 of the Report of the Royal Commission on Aboriginal Peoples, Gathering Strength, Parks Canada has created a key new body that will fulfill objectives ranging from improved communications and networking to advising on sensitivity issues. The recently launched Aboriginal Secretariat will provide Parks Canada with a focal point on Aboriginal issues and encourage a more proactive approach. It will also help develop two-way communication with associations like the Assembly of First Nations, Aboriginal women's associations, friendship centres and others.

"We'll be dealing with a variety of issues, including economics, Aboriginal tourism and Parks Canada, and other ways we can build a stronger relationship with Aboriginal people,"says Steve Langdon, who heads the secretariat. An Aboriginal person himself, he is interested in using the Internet, workshops and current technology to feed information from site to site across the country. "I plan to focus on forward thinking with Aboriginal people, on communications and on using parks and sites as venues to present Aboriginal culture," he says. "There will be a continued effort on Aboriginal employment and on potential youth employment."

The Sahtu Dene and Métis

In the Northwest Territories, the Sahtu Dene are moving quickly to protect four national historic sites intimately connected to their oral tradition. The sites are Scented Grass Hills, Grizzly Bear Mountain, Franklin's Fort and the Déline Fishery. "We want to protect the stories, as well as the sites and locations associated with the stories that make up the cultural landscape that embodies the spirit and the culture of the people there," says Chuck Blyth, the Nahanni National Park Superintendent responsible for the sites.

"The momentum for protection for the four historic sites was a cooperative effort involving many individuals and land managers and the Déline community," says Sophie Borcoman, Senior Heritage Program Officer.

The Sahtu Dene and Métis, by implementing their comprehensive land claim and the new Protected Areas Strategy for the Northwest Territories, will determine how the sites will be protected and presented. "Their leaders are very well-versed on commemorative integrity, as well as conservation and presentation planning," says Blyth."They all seem to agree where they want to end up, and we all have the same goals for ensuring the commemorative integrity. Unfortunately, it will take a while to get there because we have to be very careful to follow the right path and work out all the details."

"Our people want to protect these sites. The presentations will show information we have gathered from our elders. That is really important to us," says Raymond Taniton, Grizzly Bear Mountain and Scented Grass Hill coordinator and former Grand Chief for the region. "These sites tell the story of our culture and our history. Our people know they have to protect them and the beauty of the area," he notes, then adds that it is also important to protect the ecological and commemorative integrity of the sites from the possible impacts of surface and subsurface developments.

Manitou Mounds

Funding arrangements among Parks Canada, the Rainy River First Nation and the Province of Ontario have led to the promotion and presentation of a unique national historic site in Northwestern Ontario.

The Manitou Mounds National Historic Site, which represents some of the oldest archeological finds in the country, is taking shape as a profitable attraction that showcases both contemporary and historical Aboriginal culture. The principal burial mounds date from between 400 to 2,000 years ago, with evidence that other sites are as old as 5,000 years or more. The site stretches along 2.5 kilometres of the Rainy River shoreline. It encompasses some 29 habitations and 15 burial mounds representing the people of the Laurel and Blackduck times.

The site was designated in 1970 and has been developed as a major tourism attraction as a result of the persistent efforts of the Rainy River First Nation. These resulted in a cost-sharing agreement with Parks Canada, and a separate arrangement with the Province of Ontario. Parks Canada also has provided the First Nation with expertise on site development.

"Economically, it's good for the community and the surrounding area, as we contribute in terms of wages and purchase of goods and services. Socially, it's creating a sense of pride in the community, a sense of belonging, and a sense of ownership," says Rainy River First Nation Chief Jim Leonard. The benefits reach beyond the community, as the site has increased tourism to Northwestern Ontario. They also have a multiplier effect, as surrounding communities become more interested in partnerships with the First Nation.

Chief Leonard says the process, which began three decades ago, has been long and challenging but nonetheless a positive experience. Community elders and their traditional knowledge have been vital to the process at all stages, although all people of the Rainy River First Nation have contributed to its development. Now, they are sharing their experience with other Aboriginal groups interested in developing historic sites.

Laurel burial mound at Manitou Mounds approximately 2,000 years old. Ojibway farmstead in foreground.Photo circa 1895.

Riding Mountain

In the heart of Manitoba, Riding Mountain National Park stands out in sharp contrast to the patchwork of earth tones of adjacent farms. Its forests boast pristine scenery and teem with wildlife. The Keeseekoowenin reserve land lies within the park's boundaries. Park management has established a consultative mechanism and a decision-making forum which act as springboards for developing and implementing ideas and for dealing with outstanding issues.

The Riding Mountain Round Table is a consensus-driven circle of stakeholders who identify potential issues and advise on how mutual objectives can be best attained. "In order to maintain long-term ecological and commemorative integrity we need to work with the people," says Greg Fenton, Field Unit Superintendent.

"The people of the Keeseekoowenin First Nations were not stakeholders, however, and felt that the Round Table did not allow them an appropriate voice. They therefore created a process that would put decision-makers from both sides at the same table. At their request, we entered into a bilateral agreement to build a more positive, mutually beneficial relationship while addressing specific issues. Our challenge is to meet the expectations of the Keeseekoowenin First Nations and work with

Max Sylliboy presents cultural items to visitors at the Fortress of Louisbourg

them to address and resolve issues, while we also continue to work with the other First Nations," says Fenton.

"The Senior Officials Forum was established so we could work together in a mutually respectful atmosphere; otherwise it could be more confrontational," says Brion Whitford, the forum coordinator. "We'll bring key issues forward and hopefully they will be resolved. The forum makes this much easier, as we've established a relationship of mutual respect. We have to work together to be successful."

To increase Aboriginal workforce participation, Riding Mountain has hired a First Nations employment equity officer, a position that has existed for the past year. "It has provided a dedicated liaison with the First Nations community so we can raise the profile of our commitment to enhancing representation in the workforce while making Parks Canada opportunities better known among First Nations people," says Fenton.

The Fortress of Louisbourg

Not far from Sydney, Nova Scotia, an eighteenth-century stone fortress rises out on the rocky shore of the Atlantic Ocean. The one-time French colonial stronghold, the Fortress of Louisbourg National Historic Site, draws about 130,000 visitors annually. One of the storylines presented there deals with the important historical relationship between the French colonists and their Aboriginal allies, the Mi'kmaq.

In the mid-1990s, Parks Canada approached representatives of the local First Nations, all Mi'kmaq, to discuss how the historical Aboriginal presence and current interests could be best represented at the fortress. The relationship developed, creating a new way of doing business to enhance the commemorative integrity of the site.

Working collaboratively, Parks Canada and the Mi'kmaq developed an on-site hiking trail overlooking the fortress. Trail-side panels in three languages provide information about the Mi'kmaq, their close relationship to the land and environment, their cultural history and their place in society today.

The trail did not garner the level of interest sought by the two partners. A second product developed in 1998, however, an on-site cultural presentation by Mi'kmaq staff, was very successful. Max Sylliboy, a Mi'kmaq and aspiring archaeologist, delivers presentations that are informative, dynamic and edged with humor and wit. He carries on a continuous dialogue with the audience as he leads his guests through an assortment of cultural items. He explains their use and history, and how they remain part of a vibrant, living culture.

The ground that has been broken at Louisbourg is only the beginning of a developing relationship that has the potential to yield many benefits and opportunities for First Nations people. Similarly, the ecological and commemorative integrity of sites from coast to coast could be improved with input from the Aboriginal community.

Raymond Lawrence, a writer and freelance journalist of Ojibway and European ancestry, originally from Batchawana Bay on Lake Superior, is the principal owner of V-Formation,a small company in North Tétagouche,New Brunswick,which focuses almost entirely on the written word.His work has included researching and writing material for the federal Department of Indian Affairs and Northern Development, Tourism Canada and the Assembly of First Nations.

1. NATIONAL PARKS OF CANADA

INTRODUCTION

There is strong support among ordinary Canadians for action to protect the environment in this country. Surveys show that between 70 and 80 percent of those polled believe it is very important to preserve Canada's natural and cultural heritage. In this context, the national parks ecosystem protection mandate is taking on additional significance and becoming a more complex task.

In response to this public support, the newly established Parks Canada Agency is working to improve existing conditions in the national parks of Canada. This report covers mainly actions taken since the 1997 Report.

One initiative that has led to concrete action during the reporting period has been the report of the Banff Bow Valley Study of October 1996. Its more than 400 recommendations to the Minister responsible for Parks Canada have provided the basic direction for the management plan that will guide the park into the future.

Ecological Integrity Panel

A more recent initiative was the expert panel appointed by the Minister in December 1998 to report on how best to ensure that ecological integrity is maintained across the system of Canada's national parks. The panel assessed the strengths and weaknesses of Parks Canada's approach to the maintenance of ecological integrity in the national parks. On the basis of this assessment, it made recommendations on how best to assure that ecological integrity is maintained across the system. It also provided recommendations for strengthening the protective and scientific capabilities of the national parks.

On March 23, 2000, the Minister released the report of the Panel on the Ecological Integrity of Canada's National Parks - entitled *Unimpaired for Future Generations?* - and announced a series of immediate and longer-term actions to make ecological integrity the clear priority for Parks Canada's management of national parks. These actions were contained in the Minister's Action Plan, which highlighted four major themes:

- making ecological integrity central in legislation and policy;
- building partnerships for ecological integrity;
- planning for ecological integrity; and
- renewal of Parks Canada to better support the ecological integrity mandate.

In addition to the specific actions announced upon release of the panel report, the action plan includes a commitment to evaluate the detailed recommendations and to develop longer term strategies for implementing them. The Chief Executive Officer of Parks Canada will report publicly on Parks Canada's responses to the panel report, and on the progress made, at the

Parks Canada Round Table to be held before the end of 2000. The implementation of recommendations of the Panel on Ecological Integrity will also be reported in future state of protected heritage areas reports.

Progress toward Establishing New National Parks and National Marine Conservation Areas of Canada

Parks Canada continues to focus on the completion of the national park system as one of its main priorities. The National Parks System Plan, which divides Canada into 39 distinct natural regions based on geology, physiography and vegetation, guides efforts to establish new national parks. When each of these regions is represented in the national parks system, a cross-section of the natural diversity of the entire country will be protected, and the system will be complete.

Twenty-five natural regions are now represented by the existing 39 national parks and national park reserves. New park establishment focuses on the remaining 14, with lands reserved for national parks in three of these unrepresented regions.

Of particular note is the signing of an Inuit Impact and Benefit Agreement on August 12, 1999,as required under the Nunavut Land Claims Agreement, to provide for establishment of Sirmilik National Park on northern Baffin Island, and for Auyuittuq and Quttinirpaaq (Ellesmere Island) to move from park reserve status to full-fledged national parks.

One of Parks Canada's ongoing priorities is to secure a strong legislative base of protection for specific sites and program. Key pieces of legislation include:

- the establishment of Tuktut Nogait National Park in 1998;
- a proposal for a revised and modernized *Canada National Parks Act* which would, among other important amendments, formally establish seven national parks and one park reserve – Gros Morne, Aulavik, Wapusk,Grasslands, Sirmilik,Auyuittuq, Quttinirpaaq and Pacific Rim National Park Reserve – and streamline the process of establishing or enlarging future parks and park reserves; and
- proposed legislation to enable the establishment and management of a system of national marine conservation areas (see section on national marine conservation areas).

National parks now occupy 244,540 square kilometres of Canada (up from 222,283 in 1997). In addition to the new national parks, a federal-provincial agreement was signed in February 1998 to provide for the addition of lands on the Greenwich Peninsula to Prince Edward Island National Park of Canada. This area of significant sand dunes and wetlands is a major addition to the representation and ecological integrity of the national park. Land acquisition continues within existing national parks of Canada where land assembly is incomplete (such as Grasslands and Bruce Peninsula National Parks), and for the purpose of a new national park in British Columbia under the Pacific Marine Heritage Legacy Agreement.

In July 1999, the Nature Conservancy of Canada purchased Middle Island in Lake Erie, Canada's southernmost point of land and home to 35 rare species, with contributions from the federal government and many other private and public donations. Middle Island will be administered and managed as part of Point Pelee National Park.

The Government of Canada is committed to continuing progress towards its goal of completing the system of national parks. Solid progress has been achieved. However, the pace of progress towards completing the national park system is not a matter that can be determined solely by Parks Canada. Many issues and land use conflicts make the pace of advancement hard to anticipate and impossible to control.

National parks of Canada are usually established according to a five-step sequence. It often takes years to move through all these steps. Steps one and two, identifying representative areas and selecting a park

proposal, rely primarily on science. Step three, feasibility assessment, which includes extensive public consultation, is typically the most complex and controversial step. Socioeconomic factors, such as competing land and resource uses, and the social and economic life of communities must be considered.

Step four, negotiating a park agreement, can also be time-consuming. For the *National Parks Act* and *National Parks Regulations* to apply, national park lands must be owned by the Government of Canada. In the provinces, the federal government negotiates an agreement whereby administration and control of the land is transferred to the federal government for a new national park.

Where land is subject to a comprehensive land claim by Aboriginal Peoples, a new park can be established as part of, or pursuant to, a negotiated claim settlement. Or, a national park reserve can be established pending the resolution of the land claim. The *National Parks Act and National Parks Regulations* apply and traditional native hunting, trapping and fishing continue. Final boundaries and conditions for a national park are set after the claim is resolved.

Even after an agreement is signed, it can be years before the federal government obtains full title because of complications in clearing land titles and lengthy negotiations to purchase properties. In these cases, alternative legislative tools provide interim protection for the park's resources. Step five is to protect the park or reserve under the *National Parks Act*.

Highlights of Recently Established National Parks of Canada

Sirmilik, Quttinirpaaq, and Auyuittuq National Parks (Nunavut)

An Inuit Impact and Benefit Agreement, signed on August 12, 1999 by the Government of Canada and the Qikiqtani Inuit Association of Nunavut, provides for the establishment of a new national park on northern Baffin Island to represent the Eastern Arctic Lowlands National Region. The agreement provides for participation by local Inuit communities in planning, operations and management of the three parks and strengthens their ability to take advantage of economic opportunities.

Sirmilik National Park (Inuit for "place of glaciers") features some of the world's most spectacular fjords, numerous glaciers dropping to the sea, and significant habitat for migratory birds. The park is also important for the number and quality of its archaeological sites.

Encompassing 22,252 square kilometres, the park comprises three separate land areas: Oliver Sound, a long, narrow fjord with opportunities for boating, hiking and camping; Borden Peninsula, an extensive plateau dissected by broad river valleys; and Bylot Island, a spectacular area of rugged mountains, icefields and glaciers, coastal lowlands and seabird colonies. Bylot Island was established as a bird sanctuary in 1965 to protect the nesting grounds and outstanding concentrations of thick-billed murres, black-legged kittiwakes and snow geese. It provides critical nesting and staging habitat for 35 percent of the world's population of greater snow geese.

This same agreement also provides for Quttinirpaaq (on northern Ellesmere Island) and Auyuittuq (on southeast Baffin Island) national park reserves to be established as full national parks.

The next step will be to formally establish Sirmilik, Quttinirpaaq and Auyuittuq National Parks under national parks legislation.

Highlights of Progress on Proposed National Parks and Reserves of Canada

Progress toward establishing parks in the 14 remaining natural regions varies. Timing for establishment of these national parks depends on many factors, particularly the willingness and support of other governments and Aboriginal organizations.

Ukkusiksalik (Wager Bay, Nunavut)

This proposed park extends more than 150 kilometres inland from Hudson Bay and features glacier-polished islands and shorelines, colourful cliffs and tidal flats backed by rolling tundra. The lands have been withdrawn for interim protection since 1996 under the *Territorial Lands Act*. Parks Canada, the Kivalliq Inuit Association and the Government of Nunavut are working to conclude an agreement for park establishment.

Bathurst Island (Nunavut)

The proposed national park represents the harsh long cold winters, expanses of bedrock and very short growing season of the High Arctic. A major calving area for Peary caribou, an endangered species, is found within the area. A park feasibility study is nearing completion and negotiations on an Inuit Impact and Benefit Agreement to establish a new national park on Bathurst Island would be the next step. Lands have been withdrawn since 1996 for interim protection under the Territorial Lands Act.

East Arm of Great Slave Lake (Northwest Territories)

The Lands proposed for a new national park of Canada in this area were given interim protection under the *Territorial Lands Act* in 1970. Consultations on the proposed national park were suspended some years ago at the request of the Treaty 8 Dene, the North Slave Métis and the Yellowknives Dene, and with the concurrence of the Government of the Northwest Territories. Efforts to advance this proposed national park will be made in the context of land claim (or similar) negotiations with Treaty 8 Dene, particularly those who reside in the community of Lutsel K'e. Parks Canada continues to discuss the park proposal with residents of Lutsel K'e, the nearest community, and with other groups who have interests in the area.

Wolf Lake (Yukon)

Parks Canada has identified the Wolf Lake area in the southeast Yukon as the preferred location for a national park to represent the Northern Interior Plateaux and Mountains natural region. The Yukon Protected Area Strategy supports establishment of a protected area in the Wolf Lake area as well. Discussions are underway with the Government of Yukon, the local community and the Teslin Tlingit Council on the proposed national park with the intent being to begin a park feasibility study in 2000.

Wolf Lake is part of the traditional territory of the Teslin Tlingit. The lakes, rivers and surrounding plateaus, wetlands and forests are an unspoiled productive habitat for caribou, moose, wolf, waterfowl and salmon.

Southern Gulf Islands (British Columbia)

The southern Gulf Islands contain the highest concentration of ecologically significant and least disturbed lands within the Strait of Georgia Lowlands Region. Land assembly is continuing under the federal-provincial Pacific Marine Heritage Legacy Agreement signed in 1995. Significant new land acquisitions were announced in 1998 and 1999. The joint land assembly model reflects an innovative approach on the part of the federal and British Columbia governments in addressing an area that in general is highly developed, and where land is limited and expensive.

Interior Dry Plateau, Region 3 (British Columbia)

In 1998, the Government of British Columbia bought the Empire Valley Ranch in the Chum Creek area for the creation of a provincial protected area. Parks Canada has since initiated new studies to identify other candidate representative natural areas to possibly represent this region in the national park system. Few potential national park areas remain in the region because of competing land uses including urban development, forestry, mining and agriculture.

Manitoba Lowlands (Manitoba)

Manitoba and Parks Canada announced in November 1998 their readiness to begin negotiating an agreement to establish a National Park in the Manitoba Lowlands natural region. Discussions continue with nearby First Nations and communities. Boundary adjustments proposed in 1998 for inclusion in the park are under review. The multi-component nature of the park proposal and competing resource interests add to the complexity of negotiations.

A national park would protect a lowland boreal forest plain of black spruce forest, wetlands, large freshwater lakes and shoreline habitats of mixedwood upland, and associated wildlife including woodland caribou, moose, waterflow and shorebirds.

Torngat Mountains (Newfoundland and Labrador)

The proposed park reserve would protect a spectacular wilderness of mountains, scenic fjords, river valleys and rugged coastal areas. Cliffs up to 900 metres high rise abruptly from the sea. Inland, the Torngat Mountains reach elevations that are the highest in mainland Canada east of the Rocky Mountains.

A study by Parks Canada, the Government of Newfoundland and Labrador and the Labrador Inuit Association concluded in 1996 that establishment of a national park reserve in this area was feasible. As Canada has accepted for negotiation comprehensive land claims for northern Labrador from the Nunavik Inuit of northern Quebec as well as the Labrador Inuit, Parks Canada has offered to consult with these Aboriginal groups about this proposed national park reserve.

In the meantime, the Government of Newfoundland and Labrador has provided interim protection to the area of interest by prohibiting new mining activity and instituting a moratorium on crown applications.

Mealy Mountains (Newfoundland and Labrador)

The Mealy Mountains, located in southern Labrador, rise steeply to the south of tidal Lake Melville to heights of over 1,100 metres. The area of interest includes mountain tundra, expansive upland bogs, boreal forest, spectacular wild rivers, coastal ecosystems and diverse wildlife.

Parks Canada has identified this area as the preferred location to examine as a potential national park to represent the region, and an announcement of a feasibility study is pending. When this public study is launched, it will proceed in partnership with the provincial government and Aboriginal groups with accepted claims in the area.

Lac Guillaume-Delisle, Region 22 (Quebec)

There has been no progress on creating a new national park of Canada in this area. The federal government is willing to work with the Quebec government, the people of Umiujaq and the Makavik Corporation on behalf of Nunavik Inuit to set this area aside as a national park. However, the province has indicated that it would initiate discussion, with Inuit, of a possible new provincial park in the same area.

Regions 20 and 23 (Quebec)

Parks Canada has updated its earlier studies of these two natural regions to incorporate new information on their natural resources and land uses. Candidate representative natural areas have been identified in both regions.

Regions 25 (Quebec) and 28 (Nunavut)

Parks Canada is continuing to update its earlier studies of these two natural regions to identify candidate representative natural areas and select the best areas for possible inclusion in the national park system.

COMPLETING THE NATIONAL PARKS OF CANADA SYSTEM

National Parks of Canada Terrestrial Natural Regions

	Identify Areas of Interest	Select a Specific Park Proposal	Feasibility Study	Negotiations for Final Agreement	Park or Reserve Protected by *National Parks Act*
	1	2	3	4	5
Western Mountains					
1. Pacific Coast Mountains *(Pacific Rim,Gwaii Haanas)*					
2.Strait of Georgia Lowlands *(Southern Gulf Islands Proposal)*					
3.Interior Dry Plateau					
4.Columbia Mountains *(Glacier, Mount Revelstoke)*					
5.Rocky Mountains *(Banff,Jasper, Kootenay, Yoho, Waterton Lakes)*					
6.Northern Coast Mountains *(Kluane)*					
7.Northern Interior Plateaux and Mountains *(Wolf Lake Proposal)*					
8.Mackenzie Mountains *(Nahanni)*					
9.Northern Yukon *(Ivvavik, Vuntut)*					
Interior Plains					
10.Mackenzie Delta *(Ivvavik)*					
11.Northern Boreal Plains *(Wood Buffalo)*					
12. Southern Boreal Plains and Plateaux *(Prince Albert, Wood Buffalo, Riding Mountain,Elk Island)*					
13. Prairie Grasslands *(Grasslands)*					
14.Manitoba Lowlands *(Interlake Region Proposal)*					
Canadian Shield					
15. Tundra Hills *(Tuktut,Nogait [I])*					
16.Central Tundra Region *(Ukkusiksalik [W])*					
17.Northwestern Boreal Uplands *(East Arm of Great Lake Proposal [W])*					
18.Central Boreal Uplands *(Pukaskwa)*					
19.Great Lakes St.Lawrence Region *(La Mauricie,Georgian Bay Islands, St.Lawrence Islands)*					
20.Laurentian Boreal Highlands					
21.East Coast Boreal Region *(Mealy Mountains Proposal)*					
22.Boreal Lake Plateau *(Lac Guillaume-Delisle Proposal)*					
23.Whale River					
24.Northern Labrador Mountains *(Torngat Mountains Proposal)*					
25.Ungava Tundra Plateau					
26.Northern Davis Region *(Auyuittuq)*					
Hudson Bay Lowlands					
27.Hudson-James Lowlands *(Wapusk)*					
28.Southampton Plain					
St. Lawrence Lowlands					
29.St.Lawrence Lowlands *(Georgian Bay Islands, Point Pelee, Bruce Peninsula,Mingan Archipelago)*					
Appalachian					
30.Notre Dame-Megantic Mountains *(Forillon)*					
31. Maritime Acadian Highlands *(Fundy, Cape Breton Highlands)*					
32.Maritime Plain *(Kouchibouguac,Prince Edward Island)*					
33.Atlantic Coast Uplands *(Kejimkujik)*					
34. Western Newfounland Highlands *(Gros Morne)*					
35. Eastern Newfoundland Atlantic Region *(Terra Nova)*					
Arctic Lowlands					
36. Western Arctic Lowlands *(Aulavik)*					
37.Eastern Arctic Lowlands *(Sirmilik [W])*					
High Arctic Islands					
38. Western Arctic Lowlands *(Aulavik)*					
39.Eastern High Arctic					

[W] Lands withdrawn to provide interim protection

[I] Work continues towards establishing the portion of the park located in Nunavut and the Sahtu Settlement Area

Operational Services
National Parks Directorate
May 2000

Establishing National Marine Conservation Areas of Canada

The National Marine Conservation Areas of Canada policy was first approved in 1986 as the basis to protect and conserve a network of areas representative of Canada's marine environment. A system plan, similar to the one for national parks, guides the establishment of new areas. Entitled *Sea to Sea to Sea* (1995), the plan divides Canada's oceanic waters and Great Lakes into 29 marine natural regions.

Though the policy is still in its infancy, five of these 29 marine regions are already represented or covered by federal-provincial agreements: one by Saguenay-St. Lawrence in Quebec, another by Fathom Five in Ontario and two adjacent to Gwaii Haanas off the Queen Charlotte Islands in British Columbia. The fifth region is partially represented by the marine component of Pacific Rim National Park Reserve. To date, national marine conservation areas encompass over 4,400 square kilometres of Canada's extensive marine environment.

Of particular importance to advancing the policy is the proposed *Marine Conservation Areas Act*, which is critical to supporting a strong and viable national marine conservation areas program. This legislation will set the framework for the establishment and management of a system of marine conservation areas representative of the 29 marine regions of Canada. It also reflects the relevant Parks Canada *Guiding Principles and Operational Policies* for marine conservation areas which were developed through a process of consultation with provinces and other stakeholders, and which provide a framework for the collaborative protection of these special places.

As is the case in completing the national parks system, the pace of progress in establishing new national marine conservation areas of Canada is beyond the direct control Parks Canada. The challenge of working within a context of complex regional issues and long-established resource uses are important factors that must be accommodated.

Highlights of Progress on Establishing National Marine Conservation Areas of Canada

Lake Superior (Ontario)

The area proposed to represent the Lake Superior marine environment is geologically and structurally diverse with steep cliffs, underwater caves, spits and raised beaches. Shoals are particularly important to Superior lake trout and world-renowned coastal brook trout populations.

The joint federal-provincial feasibility study initiated in 1997 is continuing and is scheduled to be completed in 2000. A regional committee was appointed in May 1998 and has played an active role in the study. Public open houses on boundary options and possible zoning approaches were held in the spring and fall of 1999. If results of the feasibility study are positive and Ministers decide to proceed, negotiations could begin in 2000 on a federal-provincial agreement to establish a Lake Superior National Marine Conservation Area.

Southern Strait of Georgia (British Columbia)

The 1995 Pacific Marine Heritage Legacy Agreement includes a commitment for Canada and British Columbia to jointly undertake a study to assess the feasibility of establishing a national marine conservation area in the southern Strait of Georgia. The feasibility study was announced in November 1998. Consultations are now underway with other federal and provincial government agencies, local governments, First Nations and a wide variety of marine-based stakeholders regarding objectives of the study and the study process.

Gwaii Haanas (British Columbia)

Boundaries were agreed upon in 1993, and petroleum rights were relinquished in 1997 through the significant involvement of the Nature Conservancy of Canada. Subsequent work on the

part of the Nature Conservancy of Canada has succeeded in securing the relinquishment of some residual interests, clearing the way for the transfer of seabed interests from British Columbia to the federal government. Next steps include negotiating a cooperative management regime with Fisheries and Oceans Canada and the Haida, and undertaking a management planning exercise which will involve extensive consultation with local users, particularly commercial fishers.

Bonavista-Notre Dame Bays (Newfoundland)

In 1997, Canada and the provincial government launched a feasibility study for a proposed national marine conservation area for Bonavista and Notre Dame Bays, the area selected as being most representative of the marine region. The feasibility study was discontinued in March 1999 as there was not sufficient support to proceed further. Governments made the decision in response to concerns of the feasibility study advisory committee, expressed on behalf of local community residents.

Queen Charlotte Sound, Pacific Region 3 (British Columbia)

Four potential candidate areas to represent this marine region have been identified by Parks Canada and are being considered as part of a Fisheries and Oceans/British Columbia coastal planning exercise. A specific national marine conservation area proposal may evolve through this forum.

Figure 1.
Map of the National Parks and Heritage Rivers of Canada

Table 1.
National Parks and National Park Reserves of Canada (R)

National Park or Reserve (R)	Year of Agreement(s)	Year Established	Park Area (km^2)
1) Banff,Alberta	—	1885	6,641.0
2) Glacier, British Columbia	—	1886	1,349.3
3) Yoho,British Columbia	—	1886	1,313.1
4) Waterton Lakes,Alberta	—	1895	505.0
5) Jasper, Alberta	—	1907	10,878.0
6) Elk Island,Alberta	—	1913	194.0
7) Mount Revelstoke,British Columbia	—	1914	259.7
8) St.Lawrence Islands,Ontario	—	1914	8.7
9) Point Pelee,Ontario	—	1918	15.0
10) Kootenay, British Columbia	—	1919	1,406.4
11) Wood Buffalo,Alberta	—	1922	44,802.0
12) Prince Albert,Saskatchewan	—	1927	3,874.3
13) Riding Mountain,Manitoba	—	1929	2,973.1
14) Georgian Bay Islands,Ontario	—	1929	25.6
15) Cape Breton Highlands,Nova Scotia	—	1936	948.0
16) Prince Edward Island,Prince Edward Island*	1937/51/74/98	1938	27.0
17) Fundy, New Brunswick	—	1948	205.9
18) Terra-Nova,Newfoundland	1957/78/83/98	1957	399.9
19) Kejimkujik,Nova Scotia	1967	1974	403.7
20) Kouchibouguac,New Brunswick	1969/71/75	1979	239.2
21) Pacific Rim,British Columbia (R)**	1970/73/77/87/92	—	285.8
22) Forillon, Quebec	1970	1974	240.4
23) La Mauricie,Quebec	1970	1977	536.1
24) Pukaskwa,Ontario	1971/78	—	1,877.8
25) Kluane, Yukon (R)	1972/93	1976	22,013.3
26) Nahanni,Northwest Territories (R)	1972	1976	4,765.2
27) Auyuittuq,Nunavut	1972/93/99	1976	19,707.4
28) Gros Morne,Newfoundland	1970/73/78/83	—	1,805.0
29) Grasslands,Saskatchewan	1975/81/84/88/91/96	—	906.4
30) Mingan Archipelago,Quebec (R)	—	1984	150.7
31) Ivvavik, Yukon	1984	1984	9,750.0
32) Quttinirpaaq ,Nunavut	1986/99	1988	7,775.0
33) Bruce Peninsula,Ontario	1987	—	154.0
34) Gwaii Haanas,British Columbia (R)	1987/88/90/93/94/96	1996	1,495.0
35) Aulavik,Northwest Territories	1992	—	12,200.0
36) Vuntut, Yukon	1993	1995	4,345.0
37) Wapusk,Manitoba	1996	—	11,475.0
38) Tuktut Nogait,Northwest Territories	1996	1998	16,340.0
39) Sirmilik,Nunavut	1993/99	—	22,252.0
TOTAL			**244,540.0**

"Year of Agreement"refers to the year of memorandum of understanding or federal-provincial agreement to establish a national park.In some cases there have also been amending agreements,also cited.

"Year Established"refers to the year the park was included in *Schedule 1 of the National Parks Act* through Order-in-Council,proclamation or enactment.

(R) National Park Reserve:an area set aside as a national park pending settlement of any outstanding Aboriginal land claim.During this interim period, the *National Parks Act* applies and traditional hunting,fishing and trapping activities by Aboriginal peoples will continue.Other interim measures may also include local Aboriginal people's involvement in park reserve management.

* The 1937/51 documents are land conveyances rather than full agreements.

** Park area measurement includes land component only.

Table 2.
Land Withdrawn for Future National Parks of Canada

	Year of Withdrawal	Area (km^2)
East Arm of Great Slave Lake,Northwest Territories	1970	7,150.0
Tuktut Nogait, Northwest Territories (Nunavut & Sahtu Sectors)	1995	11,850.0
Ukkusiksalik (Wager Bay),Nunavut	1996	23,600.0
Bathurst Island,Nunavut	1996	8,700.0
TOTAL		51,300.0
TOTALS		**295,840.0**

Progress toward Establishing a Canadian Heritage Rivers System

Canada is steward of 20 percent of the planet's fresh water. In January 1984, the Canadian Heritage Rivers System was established by the federal, provincial and territorial ministers responsible for parks to give national recognition to the important rivers in Canada, to conserve the best examples of Canada's river heritage and to encourage the public to learn about and appreciate Canada's rivers. Parks Canada is the lead federal agency for the system. In the 15 years since its founding, Canada's system has become the fastest-growing river conservation program in the world.

Progress since 1994

Currently, the system comprises 35 rivers. New nominations of urban rivers include the St. Mary's, Thames, Detroit and Humber rivers in Ontario (1999) and the Fraser River in British Columbia (1998), Canada's fourth-largest and one of the last large North American rivers without a dam. Also noteworthy are the Grand (1994), the first entire watershed to be nominated, with corridors along all of its major tributaries, the Bonnet Plume (1998), the first to include an entire watershed of more than 10,000 square kilometers, and the Kazan and Thelon Rivers (Nunavut), both designated in 1994. The Kazan River lies on the migration route of the 320,000-strong Kaminuriak caribou herd.

Parks Canada and the Canadian Heritage Rivers System

Parks Canada is responsible for managing the five Canadian heritage rivers within national parks: the South Nahanni in Nahanni National Park, the Alsek in Kluane National Park, and three in the mountain national parks — the Kicking Horse in Yoho, the Athabasca in Jasper and the North Saskatchewan in Banff.

In September 1998, all Ministers responsible for the Canadian Heritage Rivers System again affirmed their support for the program. This political support builds upon the commitment by Ministers articulated in the 1997 Canadian Heritage Rivers System Charter, which endorsed the strategic plan initiatives.

Ecological Integrity of the National Parks of Canada

Maintenance and restoration of ecological integrity is the first priority for national parks. What is ecological integrity? It is the condition of an ecosystem where:

- the structure and function of the ecosystem are unimpaired by human activity; and
- the biological diversity and supporting processes of the ecosystem are likely to persist.

The park management plan identifies the level of use national parks can sustain, taking into account the dynamic and finite capacity of ecosystems. Plans are being updated to reflect the national parks' commitment to protect their ecosystems, to include a statement on the desirable state of each of these ecosystems, a strategy for achieving it, and a monitoring framework to measure the national parks' performance. Since April 1, 1997, six park management plans have been approved. Within the next two years, the national parks are planning to complete the revision of 20 plans (Appendix 1).

In the *State of the Parks 1997 Report*, a reporting framework based on monitoring biodiversity, ecosystem functions and stressors was introduced to assess the ecological integrity of the national parks, which takes into account the fact that the implementation of the assessment framework is a long-term undertaking. Our current understanding of the ecosystem, a complex entity, is limited. It is Parks Canada's intent to track the state of ecological integrity in the national parks on an ongoing basis, with constant reference to the advancing knowledge of ecological science. In this report, the results reported in 1997 are updated to 1999.

The biodiversity summary information on flora and fauna species occurring in the national parks has been updated with reference to the occurrence of native or exotic species, and those park species have been designated as nationally "at risk" by the Committee on the Status of Endangered Wildlife in Canada (Appendix 2). Park species richness is compared to regional species richness.

The results of the 1996 stress survey questionnaire were followed up, with field units reporting on the 1999 status of the five most important stressors. This update includes information on management actions taken by Parks Canada to deal with the five most serious stressors and their influences on the national parks. Additional components in the assessment framework addressed for the first time in this report include (vegetation) productivity under Ecosystem Functions, and climate – air quality under Stressors.

BIODIVERSITY	ECOSYSTEM FUNCTIONS	STRESSORS
Species richness	**Succession/retrogression**	**Human land use patterns**
change in species richness	disturbance frequencies and size (fire,insects,flooding)	land use maps,road densities, human population densities
numbers and extent of exotics	vegetation age class distributions	
Population dynamics	**Productivity**	**Habitat fragmentation**
mortality/natality rates of indicator species	landscape or by site	patch size,inter-patch distance, distance from interior
immigration/emigration of indicator species		
population viability of indicator species		
Trophic structure	**Decomposition**	**Pollutants**
size class distribution of all taxa	by site	sewage,petrochemicals,etc.
predation levels		long-range transportation of toxics
	Nutrient retention	**Climate**
	Ca,N by site	weather data
		frequency of extreme events
		Other
		park specific issues

Biodiversity

National Park Species Richness Representation

The national parks of Canada are dedicated to the people of Canada. They are intended for their benefit, education and enjoyment, and are to be maintained and used in a way that leaves them unimpaired for future generations.

National parks protect representative examples of the Canadian landscape. To this end, Parks Canada has identified 39 terrestrial natural regions across Canada, each of which warrants representation in the national parks system. Representative natural areas are considered for national park status where

- an area portrays the geology, physiography, vegetation, wildlife, and ecosystem diversity characteristic of a natural region; and
- an area's ecosystems are in a healthy, natural state, or if they are stressed or significantly modified, the area has the potential for restoration to a natural state.

While Canada's existing national parks cover a little over 2.5 percent of the nation's land and fresh water, they are inhabited by a majority of its native land and fresh water vascular plant (70.6 percent) and vertebrate animal (80.9 percent) species (Table 3). This is largely the result of the parks' distribution across the length and breadth of the nation's biogeographic zones and the siting of a number of parks in species-rich areas.

The national parks also contain a majority of species at risk (56.9 percent of vascular plants and 48.4 percent of vertebrates) in Canada as designated by the Committee on the Status of Endangered Wildlife in Canada. Nationally endangered and threatened species are listed in Appendix 2. While providing protection to a greater part of the nation's flora and fauna, the national parks are also host to substantial numbers of the exotic species now found in Canada (Table 3).

Estimates of species numbers are available for Canada's ecoregions for land vertebrates (amphibians, reptiles, birds, mammals) and, as illustrated in Figure 2, there is significant representation of these regional species groups in the associated national parks. In some instances, species richness in a national park exceeds that reported for its associated ecoregion, primarily because of the more intensive species inventories undertaken in the park.

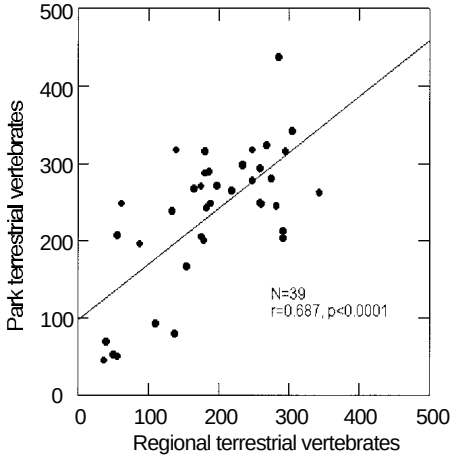
In addition to the similarity in the structural components of regional and park ecosystems represented by the land vertebrate species, there is a strong functional relationship between regional and park ecosystems with respect to vegetation production or primary productivity. Primary productivity is the

amount of new growth of vegetation produced by an ecosystem during the growing season. Figure 3 illustrates the correlation between the national parks and their associated ecoregions for the Normalized Difference Vegetation Index (NDVI), a standard index to primary productivity. The index measurements shown here are derived from satellite imagery coverage for all of Canada provided by the Canada Centre for Remote Sensing.

Although the national parks are substantially representative of the ecoregions in which they occur and of the country as a whole in terms of species associations and vegetation productivity, the situation is more complex with respect to areal coverage. A number of natural regions contain two or more national parks, and 14 of the 39 natural regions are as yet unrepresented. As stated above, it is Parks Canada's intent to complete the national parks system, with parks in each of Canada's 39 natural regions.

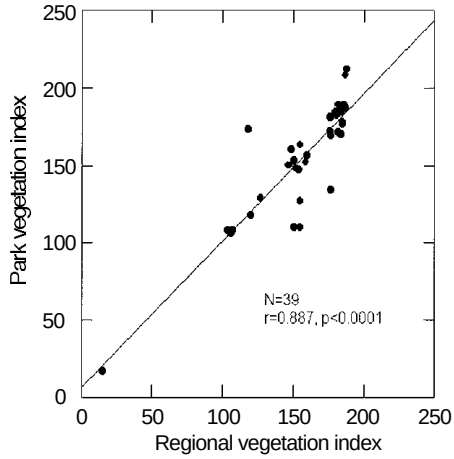
The system of parks and protected areas in Canada reflects the pattern of wilderness fragmentation across the nation and North America. The latitudinal gradient in national park area shows larger parks in the north and smaller parks in the south. It varies by more than four orders of magnitude (Figure 4) and is a reflection of the concentration of land use in the southern part of the country. Thus the national parks in the south are less representative of their associated natural regions in terms of area protected and more susceptible to land use influences on their ecological integrity. To address this problem, the national parks are working with regional partnerships to minimize impacts on the parks and other protected areas.

Figure 2.
Regional and Park Terrestrial Vertebrates



Source: Parks Canada

Figure 3.
Regional and Park Vegetation Indices



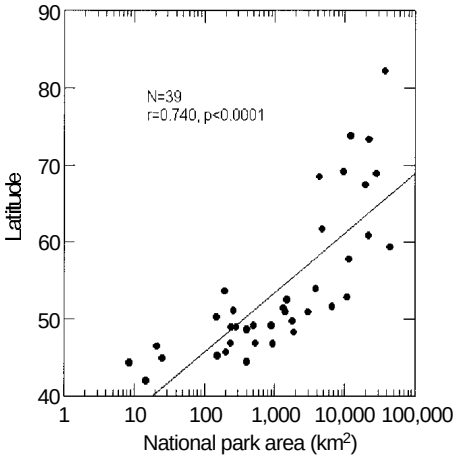
Source: Parks Canada

Table 3.
Vascular Plant and Vertebrate Species Richness in Canada's National Parks

	Native Vascular Plant Species	Exotic Vascular Plant Species	Vascular Plant Species at Risk*	Native Vertebrate Species	Exotic Vertebrate Species	Vertebrate Species at Risk*	Area (km^2)
Canada	4,521	1,221	109	1,061	24	190	9,900,000
National Parks	3,192	606	62	858	19	92	256,385
% of Canada's Total in National Parks	70.6	49.6	56.9	80.9	79.2	48.4	2.59

* Species at risk in Canada (special concern,threatened,endangered) as designated by the Committee on the Status of Endangered Wildlife In Canada as of 1999.

Figure 4. *Latitude and National Park Area*



Source: Parks Canada

BIODIVERSITY	ECOSYSTEM FUNCTIONS	STRESSORS
Species richness	**Succession/retrogression**	**Human land use patterns**
change in species richness	disturbance frequencies and size (fire,insects,flooding)	land use maps,road densities, human population densities
numbers and extent of exotics	vegetation age class distributions	
Population dynamics	**Productivity**	**Habitat fragmentation**
mortality/natality rates of indicator species	landscape or by site	patch size,inter-patch distance, distance from interior
immigration/emigration of indicator species		
population viability of indicator species		
Trophic structure	**Decomposition**	**Pollutants**
size class distribution of all taxa	by site	sewage,petrochemicals,etc.
predation levels		long-range transportation of toxics
	Nutrient retention	**Climate**
	Ca,N by site	weather data
		frequency of extreme events
		Other
		park specific issues

Ecosystem Functions - Productivity

Primary Productivity

The growth and decomposition of organic matter are important functions that enable ecosystems to maintain themselves and evolve. The growth side of the equation is referred to as primary productivity. Primary productivity is defined as the rate at which vegetation is created per unit area over the growing season.

Primary productivity changes naturally from ecosystem to ecosystem in response to ecological conditions. For example, the yearly primary productivity of the national parks in the Arctic is far below that of parks in dense mixed wood forest. Productivity is equally important to the function of both park ecosystems, and unusual changes in primary productivity may indicate undesirable changes in a park's overall integrity.

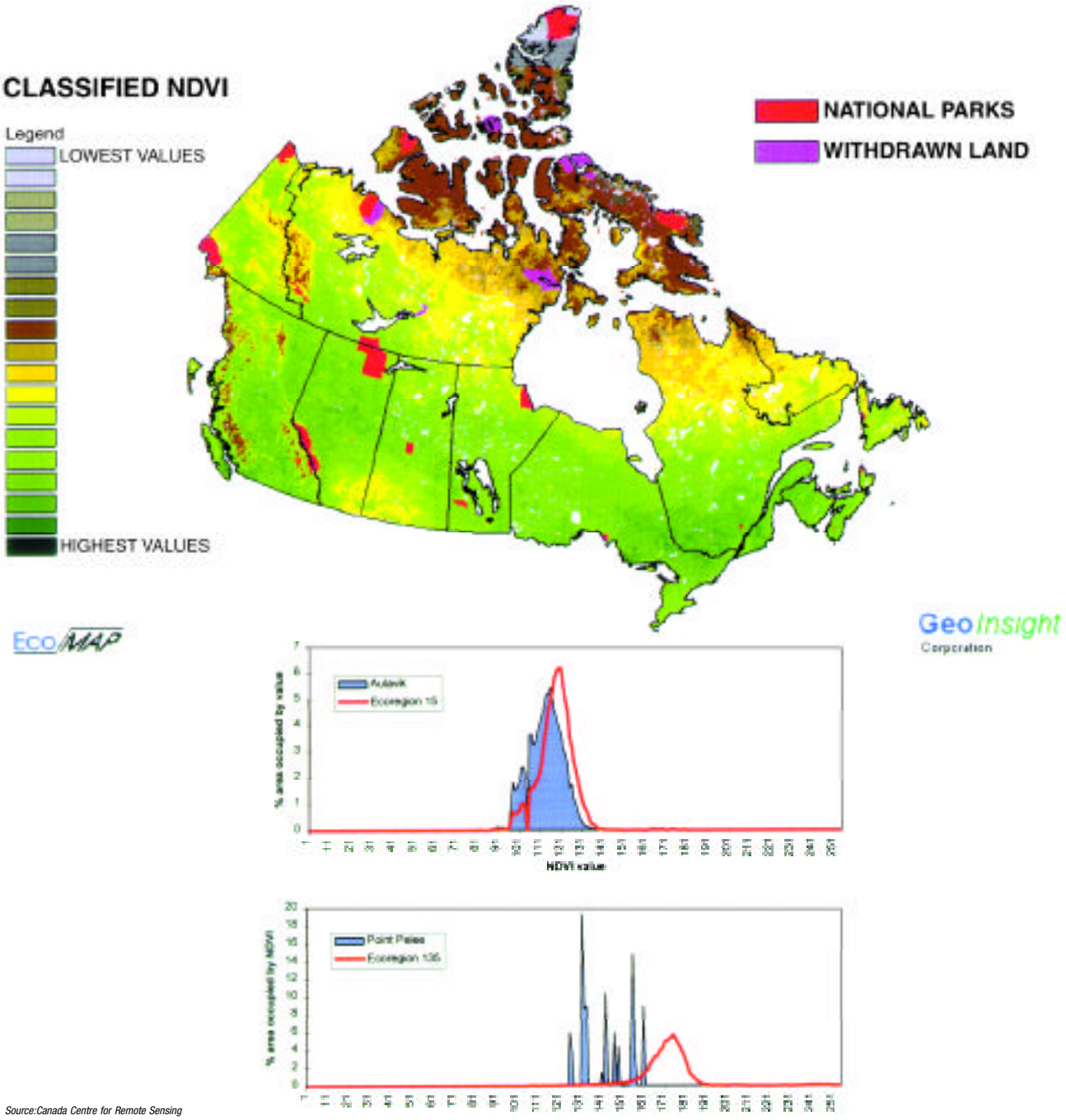
Primary productivity also changes over time. Annually, productivity rates are highest in the spring and summer growing seasons and lowest in the winter months. Productivity decreases quickly in response to natural agents such as fire, flood or insect outbreak. Over longer time periods, human activities such as deforestation, the conversion of land to buildings and roads and the effects of various pollutants can decrease the net primary productivity.

The fact that a park's primary productivity is increasing or decreasing is not so important as determining whether the changes are within the natural evolutionary range of the park's ecosystem. Productivity that changes beyond the normal range may be an early warning indicator that could help scientists understand how resilient an ecosystem might be to a multitude of stressors.

As noted in the discussion of the National Park Species Richness Representation, the Normalized Difference Vegetation Index was derived from satellite imagery as a surrogate estimate of productivity. Measures of the vegetation growth in 1994 were aggregated for all of Canada by the Canada Centre for Remote Sensing (Figure 5). The map illustrates this distribution of estimated vegetation index values across Canada for that year. As expected, the highest primary productivity occurs in the heavily treed areas of Canada, notably the boreal forests of Ontario and the valleys and slopes of British Columbia. Primary productivity decreases, especially where climate limits growth, as in the drier prairies, towards the north and in mountainous areas.

The modal vegetation index value (i.e., the value that occupies the greatest area) as well as the standard deviations were calculated for each of the 39 national parks and their associated ecoregions. The results for each park were then

Figure 5.
Mapped Results of Annual Normalized Difference Vegetation Index for 1994 in relation to National Parks of Canada



Source:Canada Centre for Remote Sensing

Normalized Difference Vegetation Index estimates of relative primary productivity for Aulavik and Point Pelee National Parks and their associated ecoregions.Aulavik is a large park that generally represents the range of annual primary productivity of its surrounding ecoregion. Point Pelee is a small park with unique vegetation types and generally lower primary productivity when compared to its surroundings (a highly productive agriculture-dominated landscape).It is premature to interpret these patterns as definitive statements on ecological integrity. However, standardized monitoring of annual primary productivity over a number of years might provide an early warning indicator that stressors are building, stable or slacking both within and outside of national parks of Canada. In this way, specific parks can be targeted for more detailed investigations. Primary productivity can therefore contribute to measuring and understanding the integrity of Canada's network of national parks.

compared with the associated ecoregions to determine how representative the park was of its principal associated ecoregion. These preliminary calculations appear to show that the primary productivity of 33 national parks matches or exceeds that of their surroundings. Perhaps over-representation is not surprising, as outstanding examples of vegetation types are often useful criteria in park selection. At the other end of the scale, six parks appear to under-represent the annual primary productivity found in their surroundings. These parks tend to be mountain parks, which consist of a high proportion of naturally impoverished areas such as the bare rock and snow-capped peaks characteristic of Canada's highest mountain ranges. Their associated ecoregions tend to include a complex of mountain and lush valley features, and in some cases pockets of productive agriculture which are far more biologically productive.

Because satellite imagery is continuously archived, subsequent years of imagery can be collected and changes to primary productivity can be monitored for each park and its surrounding ecosystem. Parks Canada intends to create a time series of such images. Once several years of data have been collected and analyzed, a more accurate baseline for the annual primary productivity can be obtained. Deviations from this baseline may indicate changes in land use or ecosystem function.

Satellite Monitoring of Northern Ecosystems

The most challenging part of ecological monitoring is getting enough information on the large changes in an ecosystem without getting lost in the multitude of details – species, habitats and processes – known as biodiversity. Canada's northern national parks are using satellite pictures to try to strike this balance. They take advantage of the GEOCOMP data set, an annual series of 20 cloud-free images of all of Canada produced by a group of federal, provincial and private-sector scientists.

The key characteristics that are measured are the extent of snow cover and the greenness of the vegetation. Plant productivity, however, does not show a simple relationship with the seasonal total of the Normalized Difference Vegetation Index or greenness index, especially in lands dominated by conifer trees, lichens or rocks. These seasonal totals nevertheless provide a rough idea of how much food is being introduced into the ecosystem's food chains. The total vegetation index values reflect the effects of the southern latitude of Wood Buffalo (6.3), the glacier-cooled climate of Kluane (2.9), the acidic bogs of Wapusk's Hudson Bay coast (4.4) and the rocky barrens of Quttinirpaaq (0.7) and Auyuittuq (1.0).

Apart from seasonal patterns of growth, a basic measure of biodiversity can also be calculated from the satellite pictures. Ivvavik National Park was dominated by only 5 of the 13 vegetation types present. These types were well mixed, however, with very complex patch shapes and an average of 11 different patches in an area of 100 square kilometres. Since different species need different habitats to survive, these measures of landscape diversity are linked to the number of species that can survive in a park.The effects of global warming, such as the invasion of southern species or the thawing of permafrost, may change the diversity of the landscape over the next few decades.

In future years, the satellite monitoring program will conduct trend analysis to find out whether the North is changing in entirely new ways. It will expand the list of indicators to include the percentage of area burned by wildfires. It will study archived satellite pictures extending back to 1984. The program is also establishing research links with Canadian and American universities to make sure that pictures are interpreted correctly and completely. Finding the balance between details and important trends will help Parks Canada keep the Canadian public informed on the condition of the parks in the North.

BIODIVERSITY	ECOSYSTEM FUNCTIONS	STRESSORS
Species richness	**Succession/retrogression**	**Human land use patterns**
change in species richness	disturbance frequencies and size (fire,insects,flooding)	land use maps,road densities, human population densities
numbers and extent of exotics	vegetation age class distributions	
Population dynamics	**Productivity**	**Habitat fragmentation**
mortality/natality rates of indicator species	landscape or by site	patch size,inter-patch distance, distance from interior
immigration/emigration of indicator species		
population viability of indicator species		
Trophic structure	**Decomposition**	**Pollutants**
size class distribution of all taxa	by site	sewage,petrochemicals,etc.
predation levels		long-range transportation of toxics
	Nutrient retention	**Climate**
	Ca,N by site	weather data
		frequency of extreme events
		Other
		park specific issues

Stressors

Follow-up to the Stressor Report

The *State of the Parks 1994 Report* published the results of a 1992 survey of stressors affecting national parks ecosystems. The survey was repeated in 1995-1996 and the results highlighted in the *State of the Parks 1997 Report*. For the *State of Protected Heritage Areas 1999 Report*, managers at all the designated sites were asked to complete a questionnaire on the status of their top five stressors. Stressors at the different national parks of Canada vary. In addition to updating the status of each stressor (increasing, the same, decreasing, unknown), they were asked to identify, from a list of seven possibilities, what actions were being taken on these stressors (Table 4). The complete results of this survey are found in Appendix 3.

These results show that overall, 50 percent of the top five stressors were thought to be increasing, while only 5 percent were thought to be decreasing. For the top stressor reported at each site, 71 percent were thought to be increasing, 3 percent decreasing. Of note is the fact that the vast majority of stressors (at least 85 percent) are regional, occurring both inside and outside park boundaries, or solely outside them. This has far-reaching implications. Canada's national parks face increasingly serious ecosystem conservation issues. The fact that the national parks rarely contain complete ecosystems impedes their ability to respond to environmental threats, which are often regional in scope.

In general, most parks are making progress in defining actions necessary to deal with the stressors affecting them. Many stressors are external, however, and require actions in concert with other land managers in the region if their effects are to be mitigated at all.

While 77% of the actions taken vary from nothing to research on the problem, rather than concrete actions, this reflects the logical sequence of identifying and delineating the problem in advance of management action. The 23% of cases where actions have been taken is significant given the magnitude of some of the problems and the time since identification of these issues.

The maintenance or restoration of the integrity of national parks ecosystems will require extensive management efforts and support from a number of regional partners. The increasing stress on the national parks of Canada highlights the urgency and seriousness of the problems faced at most sites.

Of the possible actions, doing nothing represented only 3 percent of the actions reported. Background research, data collection to define the stressor, and monitoring the stressor each represented about 20 percent of the actions taken. A project to study the stressor and mitigation measures implemented each represented 14% of the actions, and monitoring mitigation measures taken were 9% of the actions taken. Given the short time since the last survey (two years), this is an impressive amount of activity to deal with the stressors. It is a cause for concern, however, that despite these actions, most of the top stressors were thought to be getting worse.

The five stressors with the greatest numbers of activities were human disturbance, park management practices, urbanization, forestry and exotic vegetation, with a range of actions being taken for each (62 to 37). Five reports on stressors at several national parks from coast to coast are described below to demonstrate how different parks are dealing with them.

This subjective survey of stressors has been used to identify problem areas that require action. Increasingly quantified methods being used clearly show the extent, trends and effectiveness of management actions to reduce the stresses (e.g., Primary Productivity, p. 22).

Park Examples of Stressors

Prince Albert National Park has researched the stress caused by the dam on the Kingsmere River to quantify the impact and develop prediction models on what is expected to occur once the dam is removed. Monitoring of specific parameters will continue after the dam is removed in order to compare them to the prediction models. This monitoring will take place on both the impacted and a control river. Information gained from this project will be used in the rehabilitation of other rivers, where feasible.

To deal with the commercial fishing stressor at Gwaii Haanas, research is being done to determine the terrestrial impacts of reduced salmon returns in spawning streams. The loss of energy and nutrients by the removal of salmon from the system has impacts that spread beyond the habitat of the salmon. Research is proposed to improve our understanding of environmental impacts subsequent to contact with Europeans, such as this commercial fishery.

At Pacific Rim, stressors originate equally from the marine and terrestrial components of the ecosystems in which the park is situated. In the terrestrial environment, stressors that are due to forestry practices in and around the park remain. The park's response can serve as an example of the way park managers have addressed these stressors. The effects of these practices has in fact diminished, while public demand for environmental sustainability has grown and a more stringent forest practices code has been implemented. The impact of continued logging outside the park is cumulative, however, as climax forests are converted to cyclical, even-aged stands on provincially managed forest lands. The park has contributed to university and provincial research of marbled murrelet populations, which are an indicator of the integrity of climax forests, and thus helped mitigate some components of the stressor by participating in regional land-use decision-making. Park management also works actively with many outside partners to mitigate the effects of the stressor by exerting a conservation influence on land-use decisions in and around the park region.

In response to the urbanization stressor, Point Pelee has participated in regional initiatives such as the Essex County Stewardship Network, an organization of local volunteer landowners with a mission to preserve, enhance and conserve Essex County water, wetlands, forest, soils and other natural resources. Point Pelee also participates in the Natural Area Taskforce to map potential restoration sites in the watersheds immediately north of the park to identify and recreate linkages. Other initiatives include joining the Essex Region Conservation Authority to prepare a restoration proposal for the drained

Table 4.
*Summary Data from 37 National Parks of Canada on the Top Five Reported Stressors**

Status	Stressor 1	Stressor 2	Stressor 3	Stressor 4	Stressor 5	Average
Percentage	**n=36**	**n=35**	**n=33**	**n=33**	**n=33**	**n=170**
Increasing	71%	54%	54%	30%	39%	50%
Stable	20%	34%	24%	64%	54%	39%
Declining	6%	10%	14%	0%	0%	5%
Unknown	6%	3%	6%	6%	6%	5%
Actions Percentage						
1 Nothing	2%	3%	3%	5%	1%	3%
2 Background research	22%	19%	21%	19%	21%	20%
3 Data collection to define stressor	26%	20%	22%	19%	18%	21%
4 Monitoring stressor	20%	20%	14%	20%	20%	19%
5 Project to study stressor	14%	12%	17%	11%	16%	14%
6 Mitigation measures implemented	10%	16%	15%	16%	14%	14%
7 Monitoring mitigation measures	6%	10%	8%	10%	10%	9%

* A list of the top five stressors for each national park of Canada can be found in Appendix 3.

marshland adjacent to the park. In addition, Parks Canada is represented on the Carolinian Canada Coalition that has a lead role in a cores and corridors strategy for southwestern Ontario.

At Cape Breton Highlands, visitor tourism facilities like the Cabot Trail highway is a top stressor. A study on one aspect of this stressor has revealed that automotive emissions have an impact on old-growth lichens. Visitor services annual entrance and sales statistics are used to monitor the level of use, and hence the level of stress.

Climate – Air Quality

Thinking Globally

The air of the planet has been polluted ever since the Industrial Revolution. Toxic chemicals from many sources in the atmosphere threaten many animal species with a variety of diseases. Pollutants, including smoke and sulphate aerosols from the burning of fossil fuels, lead to acid deposition that stunts the growth of forests and prevents fish reproduction in so-called dead lakes. Industrial and air-conditioning chemicals eat away at the ozone layer, reducing the abundance of plankton in lakes and oceans, the basis of aquatic food chains. Carbon dioxide from fossil fuel burning exacerbates the atmosphere's greenhouse effect causing global warming, which imperils dry regions and coastal communities as well as economies and ecosystems dependent on ice and snow.

In 1998, Parks Canada completed a survey on air issues. Its findings are summarized in Table 5: the more serious concerns rank higher on the list within each group.

Air pollution issues may appear abstract yet they have concrete outcomes. Natural abiotic examples include soil moisture and surface water regimes affected by climate change with implications for biotic values, and soils saturated with nitrogen from pollutant, fertilizer and biogenic ammonia deposition. Natural biotic examples include organisms that bioaccumulate mercury and fire regimes that intensify under most climate-change scenarios. Cultural resources are also affected: limestone and marble buildings as well as tombstones or other structures bearing pictographs may be corroded by acid rain. Effects on amenities include vistas impaired by plumes, smog and regional haze or ski seasons shortened by climate warming. Finally, human health effects can include melanomas caused by excessive ultra-violet B radiation (UV-B) and respiration stressed by excessive ground-level ozone.

Table 5.
Air Issues and Examples of National Park Concerns in 1998

	Ecosystem health-related
Acid deposition	Land - leaching,mobilization of mercury, vegetation damage Water - low pH,reduced fish reproduction, greater UV-B exposure
Climate change	Heat stress,permafrost,altered water regimes, drought, climate variability, extreme events, sea level rise,reduced sea ice regime
Hazardous air pollutants	Mercury and organochlorines, causing reproductive problems in wildlife
UV-B	Photosynthesis in aquatic organisms, herptile deformities
Compounding effects	Acidification,UV-B and pesticides working together
Enrichment	Nitrogen,CO_2 altering plant successions
Ground-level ozone	Leaf damage
	Human health and enjoyment-related
Particulate matter	Reduced visibility, respiratory ailments
Ground-level ozone	Damage to lung function,breakdown of many materials
UV-B	Cataracts, skin cancer, immune system deficiency
Traffic and aircraft noise	Impaired wilderness experience
Light from towns,cities	Reduced night sky contrast and appreciation of starscapes

Focus on Acidification

Atlantic Canada, southern Quebec and New England lie downwind of the continent's major conurbations. Like the rest of the region, national parks in these areas are inundated by acid rain, ground level ozone and hazardous air pollutants, notably organochlorines and mercury. More than two decades of research at Kejimkujik National Park have shown that low pH levels are associated

with a decrease in the reproductive success of brook trout and a decline in sport fishing. Sulphate deposition is believed to have caused a significant reduction of the Atlantic salmon population. In turn, reductions of fish biomass lead to decrease in the reproductive success of loons. Wetland areas are sensitive to the leaching of minerals essential to fen plants such as sedges and shrubs. The loss of these nutrients favours *Sphagnum* and *Kalmia* species that are characteristic of bog conditions. Acidification mobilizes mercury: this may also contribute to the changing behavioural patterns and declining reproductive success of loons.

Table 6.
Acid Deposition Data at National Parks of Canada, 1994-1996 average[1]

Park[2]	Precipitation pH	SO_4 kg/ha/yr[3]
Bruce Peninsula	4.54	21.77
Cape Breton Highlands	4.79	8.97
Forillon	4.75	9.28
Fundy	4.68	11.12
Georgian Bay Islands	4.48	19.73
Grasslands	5.17	2.21
Gros Morne	4.80	9.00
Kejimkujik	4.70	10.46
Kouchibouguac	4.67	9.46
La Mauricie	4.44	18.23
Mingan Archipelago	4.74	8.60
Point Pelee	4.36	23.82
Prince Albert	5.09	3.02
Prince Edward Island	4.76	8.91
Pukaskwa	4.71	11.59
Riding Mountain	5.26	4.27
Saint Lawrence Islands	4.35	20.78
Terra Nova	4.83	7.08
Wapusk	4.91	3.44
Wood Buffalo	5.02	1.99

1 Data derived from the NatChem database, courtesy of Environment Canada.
2 National parks not included are outside the region of confident interpolation.
3 Wet sulphate,sea-salt corrected.

According to the 1997 Canadian Acid Rain Assessment, acid rain, acid snow and acid fog continue to occur despite major sulphate emission reductions achieved under the Canada-U.S. Air Quality Agreement. Indeed, Kejimkujik is only one of at least 10 national parks of Canada that will remain at risk from acid rain in 2010 even if current sulphate emissions continue to decline. The problem stems from the loss of buffering capacity after decades of acidification exacerbated by increasing nitrate emissions from the ever-growing fleet of North American vehicles.

The Canadian target load for wet sulphate deposition is 20 kg/ha/yr. Many researchers consider this too high to protect sensitive forest ecosystems, however, and have proposed 8 kg/ha/yr as a policy target. Calcareous soils can neutralize acid better than acidic soils, so the wet sulphate critical load for forest damage depends on soil type. Nevertheless, it is clear that in many eastern parks, sulphate deposition exceeds the critical load. Studies in southern Quebec show that nearly 75 percent of fish species are lost as surface water pH declines to 5. Some sport fishes can be lost at pH 5.6. Yet some pH precipitation readings in the Atlantic region in 1996 were even lower: the lowest were at Fundy (3.31), Gros Morne (4.26), Kejimkujik (3.46), Kouchibouguac (3.47), and Terra Nova (3.79). In 1994, the lowest surface water pH in Cape Breton Highlands was 4.6, while Gros Morne, Kejimkujik and Terra Nova registered values of 4.8, 4.2 and 5.1 respectively.

Action Locally

Most air issues stem from regional, continental and global air pollution sources related to manufacturing, urban transportation, domestic heating and air conditioning, and agriculture. However, in the spirit of demonstrating federal leadership and solving some local air quality problems, national parks of Canada can act unilaterally or work with partners to reduce polluting emissions. In the 1998 survey of national park air issues, correspondents listed the major air pollution sources within and near their parks.

While Parks Canada does not have any air quality programs of its own, the following examples illustrate management activities that incorporate air quality objectives.

Environmental Management - Putting the Federal House in Order

Canada is committed to play its part in reducing greenhouse gas emissions, and Parks Canada participates fully in federal efforts to demonstrate leadership by putting its own house in order. Parks Canada uses a variety of motorized equipment in its operations, including aircraft, outboard motors, off-road vehicles, snowblowers and lawnmowers, and most visitors and staff use personal vehicles to access parks. Energy conservation, air emissions, ozone-depleting substances, fleet management and other transportation and equipment issues are all priority areas for action.

Parks Canada will strive to reduce its greenhouse gas emissions to 1990 levels by the year 2000 and a further 20 percent by the year 2005. Part of this objective includes minimizing the consumption of gasoline in favour of alternative fuels. Parks Canada will also develop and implement energy management plans to incorporate energy-efficient and cost-effective technologies in both new and renovated facilities. The agency will track progress by monitoring the consumption of heating and vehicle fuel, the use of alternative fuels, the number of vehicles purchased with alternative fuel capability and emission of carbon dioxide.

Table 7.
National Park of Canada Local Air Pollution Concerns

Largest number of sources reported by one park (two parks)	5
Parks reporting no local sources	12
Parks reporting at least one in-park source,none outside	6
Parks reporting at least one external source,none inside	18
Parks reporting at least one inside and at least one outside source	6
Sources related to visitor activity	
Smoke from park campgrounds on peak weekends during visitor season	4
Automobile and boat emissions	6
Sources related to communities and through traffic	
Automobile,boat and train emissions,year-round	6
Diesel electricity generator for community outside park,year-round	3
Smoke from domestic wood burning for heat in local communities,fall to spring	2
Smoke and odour from landfill sites,1-2 per month	2
Smog from nearby large urban centre - intermittent,year-round	1
Noise from aircraft overflights,intermittent	2
Sources related to resource management and production	
Nitrogen enrichment from agricultural chemicals,seasonal,every year	1
Pesticides from agriculture,seasonal,every year	5
Smoke from wildfires and slash burning,intermittent,most years	5
Pesticides from forestry operations outside the park,infrequent	1
Particulate from peat harvesting - summer	1
Odour from industry, mostly pulp and paper mills,infrequent	3
Smoke and other particulate matter from smelters,saw mills, refineries,etc.,year-round	16
Parks reporting	
(38 national and 2 marine parks, 1 land withdrawal, 1 national historic site)	42

Northeast Regional Air Quality Committee

Because of the regional nature of air pollution and its effects on ecosystems, rural populations and outdoor recreationists, several clean air partnerships of parks, reserves, wildernesses, wildlife refuges and tribal lands have been set up in the United States. The partners cooperate to understand air issues, document air quality improvements, increase public and employee understanding of the issues and opportunities, develop support for air quality improvement goals from other agencies and lead in air pollution prevention by example. In 1995, Canada and the United States formed the binational Northeast Regional Air Quality Committee. It unites protected areas and environmental agencies in Atlantic Canada and New England that share concerns about acid deposition, ground-level ozone, air toxins (particularly mercury), regional haze and visibility impairment, as well as local particulate sources from wood burning and traffic.

The committee fosters information exchange and liaison between its members and has raised the profile of atmospheric sciences and issues in Parks Canada. It has funded an ozone monitor at Roosevelt-Campobello International Park and commissioned a review of regional air issues, key pollution sources and applicable legislation and regulations. It collaborates on a website of regional air issues and studies, and prepares public information material on air issues. It is also considering ways to support the mercury and acid rain action plans endorsed by the New England governors and eastern Canadian premiers in 1998.

Summary

Acidification remains a significant threat to the ecological integrity of Canadian national parks east of Manitoba, and is the leading air issue for parks collectively. Other threats like toxins and climate change are pressing in on ecosystems, while ground-level ozone and particulate matter are endangering human health and enjoyment. Of course these pollutants affect all natural areas and the general public, not just the protected areas and their visitors.

The source of many air quality and climate change problems continues to be the burning of fossil fuels, especially for transportation. Sulphur dioxide, particulate matter, nitrates, carbon dioxide, volatile organic compounds and heavy metals are all released in abundance by this one basic process. While governments and industry can encourage, force and implement changes to reduce pollution, only major shifts in lifestyles, consumption choices and urban design can achieve radical improvements in the global ecosystem.

Recent Initiatives

Biodiversity

Elk Restoration in Ontario

Elk (*Cervus elaphus*) were originally native to much of Ontario, over an area from Kenora to Thunder Bay in the northwest, from Windsor to the Bruce Peninsula and up to Sault Ste. Marie, and throughout the Ottawa Valley. However, most elk were extirpated in the province by the early 1800s, likely as a result of unregulated overharvesting rather than extensive habitat change. This suggests that reintroduction of elk into suitable areas will lead to a free-ranging, self-sustaining, natural population.

Recently, a number of organizations have cooperated in a program to restore elk in Ontario. A provincial elk restoration advisory committee

Photo Credit: Brian Hay

A herd of elk

was established to determine restoration feasibility and to guide reintroduction efforts with members from the Ontario Ministry of Natural Resources, Parks Canada, Cambrian College, the Ontario Federation of Anglers and Hunters, the Rocky Mountain Elk Foundation and others. Parks Canada helped by assembling the archaeological and historical evidence of elk presence for a Canadian Forest Service model that created an updated range map. Parks Canada used the updated range, snow depth, habitat, human population and land use in a Geographic Information System model to determine the location of areas which could support self-sustaining herds. This includes several large areas in the province, including the greater park ecosystems of the Bruce Peninsula, Georgian Bay Islands and St. Lawrence Islands National Parks of Canada.

As a result of this work, elk from Elk Island National Park of Canada have been released at three Ontario locations. More releases are planned for future years. This continuing species restoration project is an excellent example of how Parks Canada, in cooperation with its partners, can aid in the restoration of biological diversity by using the natural resources protected in national parks.

Protection of Bat Colonies at Grosse-Île and the Irish Memorial National Historic Site of Canada

A first wildlife inventory at Grosse-Île National Park of Canada in 1992 mentions the presence of little brown bats (*Myotis lucifugus*) in some

The bat roost at Grosse-Île National Historic Site of Canada

buildings, but does not identify either the site or number. In 1997, during an inventory of bats, four large colonies of little brown bats were identified. Four other species were also noted on the island, namely northern long-eared bat (*Myotis septentrionalis*), red bat (*Lasiurus borealis*), big brown bat (*Eptesicus fucus*) and hoary bat (*Lasiurus cinereus*) (Gauthier *et al.*, 1998).The summer concentration of bats on Grosse-Île seems to be one of the largest in Canada.A second inventory in 1998 showed a significant decline in the number of bats to just 1,100 individuals. There are several possible explanations for this decline, one being that restoration work on one of the buildings, a lazaretto, led to its abandonment by the island's second largest colony.

In recent decades, the colonies have enjoyed some degree of tranquility. However, the same will not be true in the years ahead, as Parks Canada plans to restore a number of buildings used by the bats. Major building restorations will lead to disturbances, in some cases preventing females from using the attics of the buildings. Because of this, the Quebec Field Unit wants to protect this significant concentration of bats while preserving the integrity of cultural resources. To this end, during the 1998 restoration of the lazaretto, an artificial roost was set up near the building. During the first summer season of the trial, between 30 and 50 bats used the roost. However, it was installed a little late in the season.

The use of this type of roost, which can accommodate up to 6,000 individuals, is a first in Canada. Such roosts are known to be used in the southern United States, but no data are currently available for Canada. A follow-up program was therefore implemented to measure the rate of use and the inside temperature of the roost. A resource management plan developed in the winter of 1998-1999 identified the need to obtain further information. An ongoing study in cooperation with Sherbrooke University, the Montreal Biodome and Wildlife and Parks Quebec was initiated in the spring of 1999 to determine the specific thermal requirements of females using the attics of building on Grosse-Île. The information obtained will be used to improve the design of the roosts. The results can then be used by other national parks and national historic sites of Canada as well as by managers of various buildings to improve the management and protection of these species, which are all too often misunderstood, yet are very important to terrestrial ecosystems.

Wood Turtle Conservation Concerns in La Mauricie National Park of Canada

The wood turtle *(Clemmys insculpta)* is designated as vulnerable in Canada (Committee on the Status of Endangered Wildlife in Canada, 1996). Habitat loss, poaching, human disturbance and pollution have affected its population range significantly. In Quebec, it may soon be declared a threatened species.

Although located at the northern limit of the wood turtle's range, La Mauricie National Park of Canada and adjacent lands are home to an isolated population. A study to define its permanence was initiated by the Ministère de l'Environnement et de la Faune, the St. Lawrence Valley Natural History Society, The Écomuséum, McGill University, l'Université du Québec à Trois-Rivières, la Fondation de la faune du Québec and Parks Canada.

Preliminary research began in 1994 and 1995. As a first step, all observations made by La Mauricie park wardens since the creation of

Wood turtle at La Mauricie National Park of Canada

the park in 1970 were analyzed to identify the essential habitats requiring protection. By the spring of 1996, several partners had joined the park and an exhaustive study was initiated. The tasks of capturing and marking the turtles were carried out on foot and by canoe. Data on age, sex, weight and size were recorded to evaluate the characteristics of the population. In addition, some 20 turtles were fitted with radio transmitters. In 1997, the same research was repeated and the turtles marked the previous year were recaptured to estimate the size of the population.

There are an estimated 350 individuals established near the park's limits. The population is isolated, living in areas of the river and the park's watersheds whose characteristics allow it to thrive. Fewer wood turtles inhabit the southern reaches, where the habitat is more disturbed by human activity (agriculture and cottages). Almost half the adult females nest at the same site. Nesting success is very high, although their extended four-day stay at the nesting sites increases their susceptibility to poaching for the pet trade.

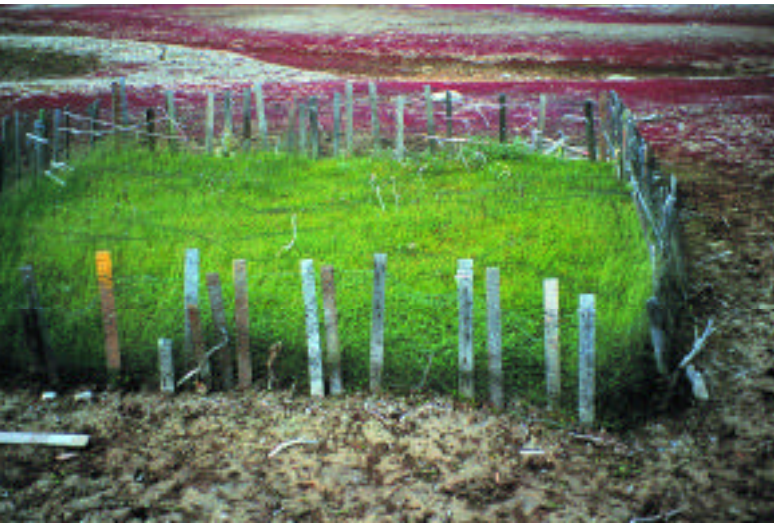
Wood turtle sightings in the park have decreased since 1970.This may be because the distribution of the species is highly localized and seems associated with the characteristics of the river and recreational areas in the southwestern part of the park, with their access roads, heavy traffic, general human disturbance and harvesting for the pet trade. The park cannot ensure the preservation of this species in the area on its own. In fact, the wood turtle's presence in the park depends on the maintenance of the population outside park limits.

Restoration of Fish Population – Fish Weir Construction at the Saint-Ours Canal

The copper redhorse *(Moxostoma hubbsi)* is a fish species endemic to Quebec. In the spring of 1999, it was designated threatened under the Quebec *Act Respecting Threatened or Vulnerable Species*. It is also recognized as a threatened species by the Committee on the Status of Endangered Wildlife in Canada. The only two known copper redhorse spawning grounds are both located in the Richelieu River, at Chambly and Saint-Ours. Parks Canada has owned the Saint-Ours site (the dam and the locks) since 1972 and therefore has a direct influence on the survival of this species. Since its construction in 1967, the dam has been a major obstacle to movements of copper redhorse and many other species, some of which are also at risk, including American eel, lake sturgeon, American shad and river redhorse.

Parks Canada has examined carefully the management problem with a view to finding a solution to this historical shortcoming in cooperation between Fisheries and Oceans Canada and Wildlife and Parks Quebec. Plans and specifications for an eel ladder and a multi-species fishway, a first in North America,have been developed. The environmental assessment of this project is essentially completed and all that remains to be done is to finalize its funding.

The potential partners in the construction of the two fish ladders, a project that falls under the St. Lawrence Vision 2000 Action Plan, are Parks Canada, Fisheries and Oceans Canada, Transport Canada, Environment Canada, Wildlife and Parks Quebec, the Quebec Department of Agriculture, Fisheries and Food and a number of non-government organizations, such as the Quebec Wildlife Foundation, Nature Action Québec and the World Wildlife Fund.



Exclosures, first set up in 1978,showing what vegetation looks like without grazing by the goose population

Ecosystem Functions – Productivity

Effects of Increased Lesser Snow Goose Populations on the Ecosystems of Wapusk National Park of Canada

Nesting lesser snow goose populations are growing at five percent or more per year in some Arctic areas, and the midcontinent population now numbers approximately three million birds. Foraging by these geese is causing extensive damage to breeding colony sites and surrounding areas, including La Pérouse Bay in Wapusk National Park of Canada. This colony of approximately 45,000 nesting pairs has been studied intensively for 30 years. Their effect on the salt marsh habitat includes increased soil salinity, reduced soil moisture and a significant decrease in primary productivity over an area nearly twice as large as Point Pelee National Park of Canada. This has resulted in a "trophic cascade": a series of subsequent effects on the organisms at all levels in the food web. Exclosures, part of a monitoring program to study the effect on the environment, were first established in 1978 and have continued to be maintained throughout the period under review.

There appear to be three major causes for the population growth of the lesser snow goose: 1) Agricultural practices in the midwestern United States have changed.As a result, more waste crops are left on the fields after harvest, which help more geese survive over the winter. 2) The number of goose hunters has declined by 25 percent over the past two decades. 3) Management practices, such as the expansion of the American National Wildlife Refuge System and the planting of lure crops are leading to less hunting and lower goose mortality rates.

The Arctic Goose Joint Venture Working Group, an international group of scientists, biologists and managers from government, private wildlife management organizations and universities, has recommended that the mid-continent lesser snow goose numbers be reduced by 5 to 15 percent annually. The objective would be to change the goose population from a conservative estimate of three million adult birds to 1.5 million through liberalized hunting practices. Parks Canada intends to cooperate in monitoring goose populations at La Pérouse Bay and support long-term ecological research, focusing its efforts on monitoring, evaluation and possible restoration of impacted ecosystems.

Prescribed Burns in National Parks

The number of prescribed burn programs has increased to include national parks of Canada from British Columbia to Newfoundland. Established programs have matured in five parks where professional fire management capabilities are well-founded. This expertise in fire management is shared between parks, strengthening the program nationally.

Despite a maturing organization, the incidence of prescribed fires within our national parks over the short term has only increased to levels that were seen in the early 1980s. There has been a modest increase in the measures of ecological integrity in fire-dependent ecosystems. These measures include the annual number and area of prescribed fires, the total area affected by fire and the number of national parks with an active prescribed fire program.

Parks Canada crew member working at a prescribed burn

Table 8.
The Prescribed Fire Program

Year	1997		1998		1999	
	Numbers	Area (ha)	Numbers	Area (ha)	Numbers	Area (ha)
Active Programs	8		10		14	
Prescribed Burns	2	85	15	2,188	19	3,137
Wildfires	46	330	132	32,477	44	65,367

Nevertheless, serious shortfalls exist in the area affected by fire. On the basis of historical fire occurrence, a yearly average of 63,000 hectares affected by fire is required to maintain fire-dependent ecosystems across the system. This number has been exceeded once, during the 1999 fire season. Compounding the overall lack of fire, the incidence of prescribed fire is not well distributed throughout the system.

With current fire management activities, allocated resources are often overtaxed. Where prescribed fire programs have not advanced, both resources and confidence in the program are limiting implementation.

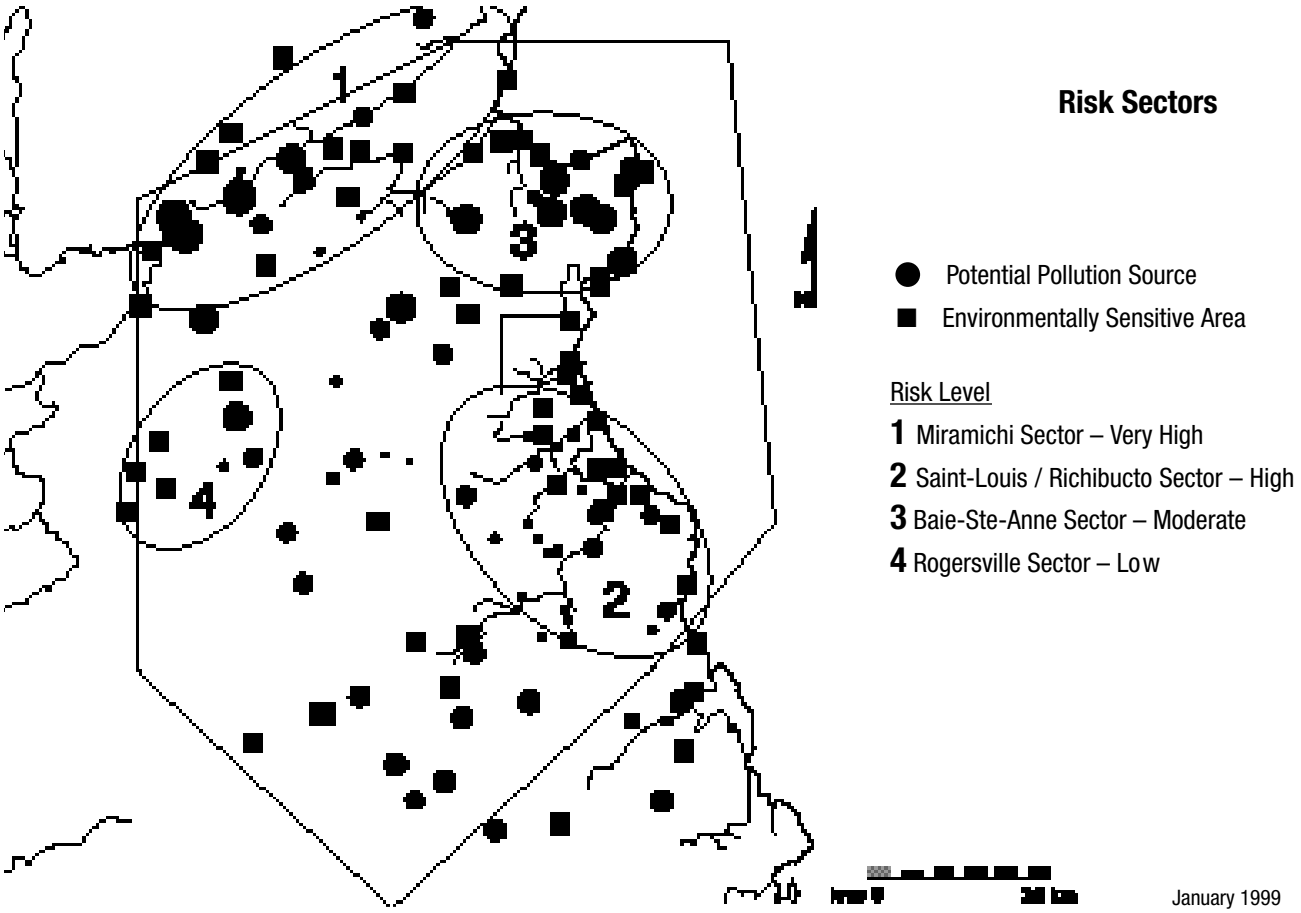
Stressors

Pesticide Accumulation in Amphibians at Point Pelee National Park of Canada

Environmental contamination with pesticides has been implicated in the decline and disappearance of amphibians from many areas around the world. For example, amphibian species diversity has declined by 50 percent at Point Pelee National Park in southern Ontario over the last 50 years. Habitat loss alone cannot account for the number of amphibian extirpations documented in the park. Similar declines in the diversity of amphibian species have not occurred at nearby southern Ontario wetlands. Amphibian extirpations at Point Pelee follow a period of DDT application on agricultural lands located in the park. DDT and metabolite concentrations were greatest in terrestrial amphibians *(Hyla crucifer* and *Bufo americanus)* and smallest in aquatic amphibians *(Rana clamitans* and *Rana pipiens).*

More than half of the amphibian fauna (6 of 11 species) at Point Pelee has been lost over the course of the twentieth century, while similar areas on the north shore of Lake Erie have not experienced similar losses. Current amphibian censuses from Long Point and Rondeau provincial parks indicate 11 and 13 amphibian species respectively, with no extirpations recorded for either park. Amphibian extirpations at Point Pelee include species like the tiger salamander *(Ambystoma tigrinum)* in 1915, Fowler's toad

Point Pelee bullfrog



Environmentally sensitive areas and risk sectors in Kouchibouguac National Park of Canada

(Bufo woodhousei fowleri) in 1949, Blanchard's cricket frog *(Acris crepitans blanchardi)* in 1972, the grey tree frog *(Hyla versicolor)* in 1986, and the bullfrog *(Rana catesbeiana)* in 1990.

DDE, a metabolite of the pesticide DDT, was found in high concentrations in Point Pelee amphibian tissues. Environmental contamination with DDT can thus be considered a potential factor in amphibian declines there. DDE and DDT are known to be endocrine disruptors. These chemicals can change the normal course of embryonic and larval development in amphibians at low doses and cause acute toxic effects at high doses. The unusually high number of amphibian extirpations at Point Pelee National Park as compared to similar areas, coupled with elevated DDE concentrations in Park amphibians, indicate that the historic use of DDT within Park boundaries may be a major factor in the decline of Point Pelee amphibians.

Potential Sources of Environmental Risk at Kouchibouguac National Park of Canada

The environment surrounding Kouchibouguac National Park includes industrialized urban areas, agroforestry and forestry regions, and commercial fisheries. The environmentally sensitive areas in and around the park have been classified and mapped in terms of environmental elements or species sensitive to natural and human impacts. Information on these areas was obtained from the park, the New Brunswick Department of the Environment and the Committee on the Status of Endangered Wildlife in Canada.

High-risk areas have been identified for each sector. The Miramichi sector (1) presents the highest risk to the park. While the Miramichi River is a major ichthyological resource, its estuary continues to be

exposed to heavy marine traffic despite the decline in shipping over recent years. Both banks of the Miramichi support extensive urban and industrial activities and its upper reaches drain a vast logging area. Littoral drift to the south can transport pollutants towards the park or other sensitive areas.

The Saint-Louis/Richibucto sector (2) is also urbanized, and its extensive rural habitat as well as its farming, fishing and forestry operations pose a high risk. Industry, however, is a less significant factor. The waterways in this sector flow through the park to the sea. The Baie-Sainte-Anne sector (3) is classified as a moderate risk because of the presence of industries, urbanization and agriculture. The Rogersville sector (4), in the heart of a forested area, has little urban development; it includes a few farms and represents a low risk to the park. The remainder of the area surrounding the park is characterized primarily by forestry and farming, although it does include a few small populated areas and a number of dumps, now closed. The risk in this area is low and not localized.

A series of associations with local partners assures future cooperation on joint action to reduce the environmental risk for the park and the surrounding area.

Non-native Plant Control Program in Jasper National Park of Canada

In 1998, non-native plants were found to pose a significant ecological threat to all areas of Jasper National Park. These plants displace native species which provide forage and soil stabilization and destroy critical wildlife habitats. As many as 60 are found in the park. Most populations occur along transportation corridors, including some known to be vectors or invasion points for weed species. There are a number of very problematic infestations on the Canadian National Railway right-of-way, some of which have spread to park lands immediately next to the right-of-way. These infestations are noted as high priorities for eradication or control because of their particularly aggressive nature and legislated status as restricted or noxious weeds. The need to take preventive action to avoid additional infestations is no less important.

Inherent within the program to deal with non-native plants is the concept of "integrated pest management," defined as a means of keeping pest damage below unacceptable levels through a combination of preventive practices and carefully timed control treatments. The goals of integrated pest management are to re-establish sustainable native vegetation wherever it is appropriate and practical and reduce long-term reliance on chemical means of vegetation control.

Reducing Wildlife Mortality in Banff National Park of Canada

Banff National Park has made a concerted effort to reduce wildlife mortality and reconnect habitat separated by the Trans-Canada Highway, which crosses the park. Currently, vehicles drive by at the rate of one every six seconds, and at more than twice that rate during the summer months. Highway traffic volumes are rising by more than two percent annually. As a result, the death rate of wildlife struck by vehicles on the highway has soared.

To reduce wildlife mortality, Parks Canada has fenced off 47 kilometres of the highway. To mitigate the subsequent problem of habitat fragmentation caused by the highway and the fence, Parks Canada has built two overpasses for the exclusive use of wildlife, a first for Canada. World-leading research on the effectiveness and design of wildlife crossing structures is also being conducted in the park at 24 wildlife crossing structures of varying design. In 36 months of monitoring, more than 20,000 individual wildlife crossings have been detected. Elk, deer, mountain sheep and coyote crossings predominate, although wolf, grizzly bear, black bear and cougar have also been detected, as well as a wide variety of small mammals. Overall, common species appear to adapt to the structures more readily than wary, large carnivores. Wildlife mortality remains high on unmitigated sections of the highway. Additional mitigations to improve habitat connectivity for wary animals are being researched.

With the large amount of infrastructure and high concentration of human use in and around the Town of Banff, Parks Canada has been working vigorously to restore the resulting disruption of predator-prey relationships in the park by creating wildlife corridors around the town. In addition, the 1998 community plan for the Town of Banff has reduced the area occupied by the town by 17 percent, and placed a limit on both the permanent population and commercial development. These actions will increase the availability of wildlife habitat around the townsite.

Softshell Clam Harvesting in Kouchibouguac National Park of Canada

The four inventories conducted in the last decade reveal that the health of the shellfish flats has reached a critical threshold, with harvesting far exceeding recruitment. The softshell clam flats were closed to harvesting from April 1, 1996 to March 31, 1998. During the two-year closure, a complete softshell clam inventory and monitoring program was carried out in cooperation with fishers. Their knowledge of the area enabled Parks Canada to compile a complete record of the species' distribution within park boundaries.

The softshell clam flats were reopened on April 1, 1998, under specific conditions designed to allow the population to recover. The resumption of softshell clam harvesting after the two-year closure demonstrates the importance of the involvement of resource users in sound natural resource management. Softshell clam harvesters felt that they were part of the decision-making process and did not hesitate to support Parks Canada in its conservation efforts. The data collected to date show that clam recruitment is on the rise.

Prince Albert National Park of Canada - Carbon Budgets and Air Toxins

The Boreal Ecosystem-Atmosphere Study was a multinational research program on the role of the boreal forest in the global carbon cycle. Several of the program's studies on plant-air gas exchange, as well as remote sensing experiments to evaluate satellite technologies for monitoring vegetation, were carried out at Prince Albert National Park of Canada between 1993 and 1996. Indeed, the park provided one of the major research venues for the program, with onsite equipment buildings and a buried power line. The Boreal Ecosystem-Atmosphere Study has been succeeded by the Boreal Ecosystem Research and Monitoring Sites program in which the park continues to play an active role. It accommodates research into the effects of climate change on the boreal forest.

Under its environmental management strategy, the park demonstrates leadership by monitoring and reducing the volume of greenhouse gases emitted as a consequence of vehicle fleet and other park operations. Its management documents also recognize potential air pollution issues in areas where petroleum was, or is presently stored, where hazardous materials are generated by park operations, or in areas of human waste disposal and numerous other related concerns, such as the potential for agricultural pesticides to drift into the park.

2. NATIONAL HISTORIC SITES OF CANADA

INTRODUCTION

CANADA'S NATIONAL HISTORIC SITES REPRESENT THOUSANDS OF YEARS OF HUMAN HISTORY IMPRINTED ON THE LANDSCAPE OF THE COUNTRY. THESE SPECIAL PLACES DEMONSTRATE NOT ONLY THIS COUNTRY'S DIVERSITY OF GEOGRAPHY AND CULTURES OVER THE COURSE OF ITS HISTORY, BUT ALSO EXPRESS ELEMENTS OF OUR NATIONAL IDENTITY AND ILLUSTRATE KEY ASPECTS OF OUR COLLECTIVE PAST. EACH PLACE CONTRIBUTES AN IMPORTANT THREAD TO THE CANADIAN TAPESTRY. EVERY ONE HAS BEEN RECOGNIZED AS BEING SIGNIFICANT TO THE NATION.

While these sites are part of the nation's past, they are not detached from the present. However different their technologies, styles and values may appear to be from ours today, the continuum of history links the past to the present. They are tangible examples of this continuity. Indeed, many sites continue in their historic function as hotels, churches, markets and places of business or government. Some commemorated places have been converted to other private or public purposes; others serve as community museums or sites of historic interest in park-like settings.

Our historic sites are located in more than 400 communities from coast to coast. Some are large and imposing; others are unassuming and part of everyday life; and a few speak to us in a subtle way. A sacred Aboriginal site, for example, may be little more than a hilltop, a raised mound or a circle of stones. Yet they all allow us to experience the spirit of their time and gain a sense of the past that can span many centuries and cultures.

This chapter is a progress report on the state of the national historic sites program of Parks Canada since the 1997 *State of the Parks Report.*

COMMEMORATIVE INTEGRITY AND THE COMMEMORATIVE INTEGRITY STATEMENT

The need for a broad conceptual framework to assess and report on the overall state of a national historic site of Canada led Parks Canada to develop the concept of commemorative integrity. This concept integrates the key protection,presentation and operational aspects of a site into a single,comprehensive framework. Commemorative integrity defines the health and wholeness of a national historic site. A site is said to possess commemorative integrity when

- the resources that symbolize or represent its importance are not impaired or under threat;
- the reasons for its national significance are communicated to the public effectively; and
- all its heritage values are respected.

A commemorative integrity statement is a document that details what is required to achieve commemorative integrity at a particular site.The statement contains objectives which provide the site with benchmarks for planning,managing, reporting,monitoring and taking remedial action.

While there are many wide-ranging achievements, the program remains focused on ensuring the commemorative integrity of Canada's national historic sites. Two important trends continue. First, the application of the concept of commemorative integrity at sites administered by Parks Canada is expanding. Second, the program's support of national historic sites not owned by Parks Canada (by far the majority of the total) in order to build relationships and ensure commemorative integrity is increasing. The range of activities described in the pages that follow demonstrates Parks Canada's active leadership in the national historic sites community.

The Expanding Family of National Historic Sites of Canada

The Parks Canada Agency Mandate

To 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 this heritage for present and future generations.

The national historic sites system consists of 849 commemorated places across the country: 57 have been designated by the Minister of Canadian Heritage since the *State of the Parks 1997 Report*. Of this total, 144 (or fewer than one in six) are administered by Parks Canada.The remainder are owned by other federal departments, other levels of government, public and private corporations, heritage groups and individual citizens.

In concurrence with the *Historic Sites and Monuments Act* and the *Parks Canada Agency Act*, the national historic sites program is assuming a role of support, education, cooperation and collaboration within the larger family of national historic sites. These activities, which have both formal and informal aspects, affirm Parks Canada's broad role within the national historic sites system and reinforce the importance of ensuring the commemorative integrity of national historic sites across Canada, regardless of ownership.

Cooperation with owners and managers of other national historic sites is not a new role for Parks Canada. The National Cost-sharing Program, which has been in place for more than ten years, is the most obvious example. This program is in the process of being reviewed to improve its effectiveness. Until recently, however, most involvement with other national historic sites had been on an emergency, *ad hoc* basis. We are now developing a more formalized alliance framework based on support, communication and cooperative action between sites.

The Ontario Model

Parks Canada has made progress on an alliance framework in various parts of the country. Work on a national alliance is scheduled to begin next year, and the National Historic Sites Alliance for Ontario could well serve as a model. In Ontario, Parks Canada staff played a key role in the organization of this alliance in the fall of 1997. Its objective is to ensure the commemorative integrity of all national historic sites in the province through cooperative action.

Members of the Ontario alliance publish a bilingual newsletter that reaches over 160 national historic sites in the province and 37 partner organizations as well as Parks Canada staff across the country. They organize conferences and workshops and promote training, marketing and outreach efforts within the heritage community. Not only has the alliance attracted the broad participation of owners and managers of national historic sites, but its steering committee includes representatives from key players like Heritage Toronto, the Ontario Heritage Foundation and the provincial Ministry of Citizenship, Culture and Recreation. This province-wide support from the heritage field is a major achievement accomplished in less than two years.

Claybank Brick Plant,Saskatchewan – a national historic site of Canada assisted through the National Cost-sharing Program

Expanding Efforts

Through formal and informal networks, Parks Canada is expanding its efforts in the family of national historic sites. In all regions of the country, the agency's organization and sponsorship of cultural resource management training have proven to be an effective way to establish contact with the managers of other national historic sites and with others in the heritage community. Indeed, the idea of a historic sites alliance emerged from the cultural resource management training courses. More than 70 cultural resource management training workshops have been held since 1994. They have attracted nearly 1,700 participants. Attendance from outside Parks Canada has increased substantially over the last six years. At times, one-half of the attendees have been from non-Parks Canada sites or organizations.

Parks Canada's successful development and application of commemorative integrity statements to its own sites and to those supported through the National Cost-sharing Program have attracted the attention of other managers of national historic sites. On request, Parks Canada has helped several national historic sites develop their own commemorative integrity statements to guide their decision-making. They include Hatley Park (the former Royal Roads Military College) near Victoria; Vimy Ridge and Beaumont-Hamel, the only national historic sites located outside Canada; the Central Experimental Farm in Ottawa; the Winnipeg Exchange District; and the Diefenbunker. Such assistance is just one way Parks Canada provides leadership within the larger national historic sites family to fulfill its mandate – ensuring the commemorative integrity of Canada's national historic sites.

Enhancing the National Historic Sites of Canada System

System Planning

Introduction

Parks Canada is responsible for the national program of historical commemoration, which includes not only national historic sites but persons, events and other phenomena in Canadian history considered to be of national importance. These designations are made by the Minister of Canadian Heritage on recommendations from the Historic Sites and Monuments Board of Canada.

These designations cover many aspects of our history. In the last decades of the twentieth century, the way we perceive history has broadened to include such areas of study as business and industry, urban and rural development patterns, Aboriginal history as well as many facets of our social history. The new national historic sites of Canada system plan, scheduled for approval in 2000, provides priorities and a framework for national commemoration that reflect this expanded view of Canadian history. The goal of the national historic sites program is to illustrate the full range and diversity of Canadian history through a system of sites, persons and events deemed significant to the nation.

The Minister has made the following designations:

National Historic	Designations Reported in 1997	Designations Since 1997	Total Designations
Sites	792	57	849
Persons	537	20	557
Events	300	24	324

Total designations since 1997: 101

The Thematic Framework for Historical Commemoration (1999)

A thematic framework has guided Parks Canada's efforts since the implementation of its first approved system plan in the early 1980s. The recently revised framework builds on the 1981 system plan, but is simpler and more flexible in its approach. It is thus more responsive to evolving public concerns and interests, while incorporating past and current historiographic trends.

The thematic framework provides a context for the Historic Sites and Monuments Board of Canada in its consideration of aspects of Canadian history. It also serves as a guide for members of the public who wish to make a submission to the Board. Within Parks Canada, the framework is a tool that informs decisions on research, planning and other activities.

Strategic Priorities

After a system plan review and consultations in the mid-1990s, the *State of the Parks 1997 Report* identified three broad strategic priorities for the national historic sites program: Aboriginal, ethno-cultural communities and women's history. These remain the program's strategic priorities. Since 1997, the Minister has made a total of 101 designations, of which 48 fall under one or more of these three priorities. These newly commemorated sites (22), persons (15) and events (11) span nine provinces and one territory and encompass a wide variety of historic themes. They are listed below.

Inventory of Recently Commemorated National Historic Sites, Persons and Events of Canada

ABORIGINAL HISTORY – this priority area includes the full record of the presence and activities of First Nations,Inuit and Métis peoples in Canada.Although the national historic sites of Canada system includes a number of sites,persons,events and other phenomena commemorating aspects of Aboriginal history, gaps in the representation remain.

Déline Fishery/Franklins Fort National Historic Site *Site of cultural significance to the Sahtu Dene and wintering quarters of Sir John Franklin and his second expedition*	Déline, Northwest Territories
Grizzly Bear Mountain and Scented Grass Hills National Historic Site *Expression of cultural values through the interrelationship between landscape, oral histories, grave sites and cultural resources*	Grizzly Bear Mountain & Scented Grass Hills, Northwest Territories
Kiix?in Village and Fortress National Historic Site *Site of a First Nations village and a fortress with significant architectural remains*	Bamfield, British Columbia
Nagwichoonjik (the Mackenzie River) National Historic Site *River that flows through the traditional homeland of the Gwichya Gwichin and continues to be culturally, socially and spiritually significant for these people*	Tsiigegchtchic, Northwest Territories
Pointe Abitibi National Historic Site *Traditional summering area and sacred place for the Algonquin*	Pikogan,Quebec
Gabe Acquin (1811-1901) Person of National Historic Significance *Important Maliseet guide, hunter and cultural broker*	New Brunswick *(recommended plaque site)*
Dispersal of the Huron-Wendat from Huronia Event of National Historic Significance *Dispersal circa 1650 and their ultimate settlement in old Wendake in 1697*	Wendake, Quebec *(recommended plaque site)*
James Isbister (1833-1915) Person of National Historic Significance *Leader of English-speaking Métis during 1870s and 1880s*	Prince Albert,Saskatchewan *(recommended plaque site)*

Rev. Peter Jones (Kahkewaquonaby) (1802-1856) Person of National Historic Significance *Mississauga chief and Methodist minister, the first person to develop a written Ojibwa language*	Hagarsville, Ontario *(recommended plaque site)*
Mi'kmaq on Malpeque Bay Event of National Historic Significance *Traditional hunting, fishing and gathering place for the Mi'kmaq*	Lennox Island, Prince Edward Island
Ethno-Cultural Communities History - a term adopted by Parks Canada to describe identifiable ethno-cultural groups that make up the Canadian social mosaic.This program definition does not include peoples of French,British or Aboriginal origins.	
Africville National Historic Site *Community representing Black settlement in Nova Scotia – an enduring symbol to Black Canadians*	Halifax,Nova Scotia
Buxton Settlement National Historic Site *Farming community established by Underground Railroad refugees*	Buxton,Ontario
Joseph Schneider House National Historic Site *Site associated with the migration of Pennsylvania-German Mennonites from Lancaster County, Pennsylvania to the Kitchener-Waterloo area*	Kitchener, Ontario
Little Dutch (Deutsch) Church National Historic Site *Oldest known surviving church in Canada associated with the German-Canadian community*	Halifax,Nova Scotia
Nazrey African Methodist Episcopal Church National Historic Site *Stone church built in 1848 by Underground Railroad refugees associated with Bishop Willis Nazery*	Amherstburg, Ontario
Pier 21 National Historic Site *Highly specialized building complex related to Canadian immigration after the Second World War*	Halifax,Nova Scotia
The Main National Historic Site *Historic district speaks to the development of cultural communities and the immigrants corridor*	Montréal,Quebec
Ukrainian Catholic Church of the Immaculate Conception National Historic Site *One of the most ambitious and accomplished buildings by Rev. Philip Ruh*	Cooks Creek,Manitoba
Ukrainian Catholic Church of the Resurrection National Historic Site *Mature and culminating expression of Ukrainian identity in the Dauphin Block settlement, built in 1936-1939*	Dauphin,Manitoba
Wasyl Negrych Pioneer Homestead National Historic Site *Believed to be the earliest and best preserved example of a Ukrainian pioneer farm*	Dauphin,Manitoba
Black Pioneers in British Columbia Event of National Historic Significance *Event that influenced the founding and history of British Columbia,with an impact on religious, military and social institutions of the province*	Victoria,British Columbia *(recommended plaque site)*
Thornton and Lucie Blackburn Persons of National Historic Significance *Escapees from slavery who established the first cab company in Toronto*	Toronto, Ontario
Joséf Olesków (1860-1903) Person of National Historic Significance *Person who had a profound impact on Ukrainian settlement in the West*	Dauphin,Manitoba *(recommended plaque site)*
Women's History - women's history in Canada is now a major field of study. By identifying women's history as one of its strategic priorities, Parks Canada intends the commemoration program to reflect this important trend.	
Ann Baillie Building National Historic Site *Nurses' residences were central to the nursing tradition*	Kingston,Ontario
Begbie Hall National Historic Site *Nurses' residences were central to the nursing tradition*	Victoria,British Columbia
Hershey Pavilion National Historic Site *Nurses' residences were central to the nursing tradition*	Montréal,Quebec
Ladies' Seminary National Historic Site *Example of the nature of and setting for the earliest phase of higher education of women;1878*	Wolfville, Nova Scotia
Leaskdale Manse National Historic Site *Home of Lucy Maud Montgomery from 1911-1926*	Leaskdale, Ontario
Pavillon Mailloux National Historic Site *Nurses' residences were central to the nursing tradition*	Montréal,Quebec

St.Boniface Hospital Nurses' Residence National Historic Site *Nurses'residences were central to the nursing tradition*	Winnipeg, Manitoba
Edith JessieArchibald (1854-1936) Person of National Historic Significance *Key figure in the Nova Scotian women's fight for the vote*	Halifax,Nova Scotia *(recommended plaque site)*
Canadian Woman's Christian Temperance Union Event of National Historic Significance *Largest nondenominational Canadian women's organization in the late nineteenth century*	
E.Cora Hind (1861-1942) Person of National Historic Significance *Leading advocate of women's rights and suffrage in Manitoba*	Winnipeg, Manitoba *(recommended plaque site)*
Marie Lacoste-Gérin Lajoie (1867-1945) Person of National Historic Significance *Crusader for women's rights and suffrage in the province of Quebec*	Montréal,Quebec *(recommended plaque site)*
Helen Gregory MacGill (1864-1947) Person of National Historic Significance *Juvenile court judge and internationally acknowledged expert who campaigned for women's suffrage and law reform*	Vancouver, British Columbia
Dr. Helen MacMurchy (1862-1953) Person of National Historic Significance *Leading advocate of public health reforms in Canada in the late nineteenth and early twentieth centuries*	Ottawa,Ontario *(recommended plaque site)*
Jeanne Mance (1606-1673) Person of National Historic Significance *Founder of l'Hôtel Dieu in Montréal, and Canada's first lay nurse, renowned for her care under extreme conditions*	Montréal, Quebec *(recommended plaque site)*
Violet Clara McNaughton (1879-1968) Person of National Historic Significance *Organized the Women Grain Growers and instigated public-funded medical care programs*	Saskatoon, Saskatchewan *(recommended plaque site)*
Newfoundland Outport Nursing and Industrial Association Event of National Historic Significance *Outpost nursing association that provided a range of health care services*	Newfoundland *(recommended plaque site)*
Margaret Newton (1887-1971) Person of National Historic Significance *Person who contributed to scientific information on rust resistant grains, rust diseases and wheat stem rust*	Winnipeg, Manitoba *(recommended plaque site)*
Persons Case Event of National Historic Significance *Event that allowed for the appointment of women to the Senate and established that under the law Canadian women were full persons equal to men*	Ottawa,Ontario *(recommended plaque site)*
Idola Saint-Jean (1880-1945) Person of National Historic Significance *Leader in the fight for women's suffrage in Quebec and for reform of the civil code in the twenties and thirties*	Montréal,Quebec *(recommended plaque site)*
Mary Meager Southcott (1862-1943) Person of National Historic Significance *An advocate of professionalization of nursing in Newfoundland and noted for introducing the Nightingale system*	St. John's, Newfoundland *(recommended plaque site)*
Ursulines of Trois-Rivières Event of National Historic Significance *Order that provided quality educational services for 300 years*	Trois-Rivières, Quebec *(recommended plaque site)*
Victorian Order of Nurses Event of National Historic Significance *Major national organization that provides health services to poor and isolated Canadians*	Ottawa,Ontario *(recommended plaque site)*
War Brides Event of National Historic Significance *Contributions of the some 48,000 war brides who came to Canada as a direct result of Canadian participation in the Second World War*	Halifax,Nova Scotia
Winning of the Vote by Women Event of National Historic Significance *The struggle of women to achieve the vote*	Winnipeg, Manitoba *(recommended plaque site)*
Young Women's Christian Association Event of National Historic Significance *Organization that supported an enlarged role for women in employment,higher education and public service*	Saint John,New Brunswick *(recommended plaque site)*

Thematic Priorities

In addition to the three broad strategic priorities, the revised thematic framework provides further guidance through the identification of under-represented historical themes.

All 101 designations the Minister has made since the *State of the Parks 1997 Report* fall under the strategic and thematic priorities and 61 apply to one or more of the eight thematic categories.[1] Forty-two of the 61 designations are new national historic sites. As varied as the themes, the commemorated places, persons and events encompass nine provinces and two territories, as well as Canada's presence overseas.

Thematic priorities and designations by the Minister since 1997 are listed below.

Thematic Priority	Number of Designations since 1997
Migration and Immigration	6
External Relations	2
Sciences	4
Learning and the Arts	8
Hunting and Gathering	3
Technology and Engineering	6
Extraction and Production	15
Architecture and Design	24

[1] Seven of these designations appear under more than one of the categories.

Assistance to Sites Owned by Others: The National Cost-sharing Program

The National Cost-sharing Program is one of the key tools Parks Canada uses to support partners in ensuring the commemorative integrity of Canada's national historic sites. The program allows Parks Canada to assist partners in the protection and presentation of national historic sites through contribution agreements.

Fifteen national historic sites of Canada in nine provinces and one territory have received assistance under the program since the *State of the Parks 1997 Report.* They are listed below.

- **Lunenburg Academy, Lunenburg,Nova Scotia**
  restoration and presentation
  Rare survivor from Nova Scotia's nineteenth-century academy system
- **St. Patrick's Basilica, Montréal,Quebec**
  restoration and presentation
  1843-1847 French Gothic Revival building that remains at the heart of Montréal's Irish community
- **Stephen Leacock Museum/Old Brewery Bay, Orillia, Ontario**
  emergency stabilization; conservation and presentation
  The former home of the famous Canadian humourist
- **Elizabeth Cottage,Kingston,Ontario**
  conservation and presentation
  Gothic Revival villa built in 1841
- **Parkwood,Oshawa, Ontario**
  conservation and presentation
  First World War-era grand estate with gardens
- **Old Stone Mill,Delta,Ontario**
  conservation and presentation
  One of the oldest surviving mills in Ontario, built in 1810
- **Ruthven Park,Cayuga, Ontario**
  conservation and presentation
  Fine picturesque country estate laid out by entrepreneur David Thompson
- **Ruin of St.Raphael's Church,St. Raphael's, Ontario**
  emergency stabilization
  One of the earliest Roman Catholic monuments in English-speaking Canada.
- **Christ Church Royal Chapel, Tyendinaga Reserve,Ontario**
  conservation and presentation
  Historic royal chapel associated with the establishment of Mohawk peoples in Ontario in the aftermath of the American Revolution
- **Inglis Grain Elevators,Inglis,Manitoba**
  conservation and presentation
  Rare row of standard-plan country grain elevators typical of "Golden Age" of Prairie agriculture, the 1920s to the 1940s
- **Claybank Brick Plant,Claybank,Saskatchewan**
  interim stabilization,conservation and presentation
  Important early twentieth-century brick-making complex
- **Seager Wheeler Maple Grove Farm,Rosthern,Saskatchewan**
  acquisition and presentation
  Typical grain farm of early twentieth century, developed by Seager Wheeler

- **Stirling Agricultural Village,Stirling,Alberta**
  conservation and presentation
  Distinctive Mormon pioneer dryland irrigation farming and settlement pattern
- **Arvia'juaq and Qikiqtaarjuk,Arviaq, Nunavut**
  protection and presentation
  Inuit summer occupation sites with rich history and surviving in-situ *resources*
- **Fall Caribou Crossing,Baker Lake,Nunavut**
  protection and presentation
  Site of critical importance to the historical survival of the Inuit community

Parks Canada also contributed funding to address the emergency conservation needs of the following threatened national historic sites of Canada:

- **Nazrey African Methodist Episcopal Church, Amherstburg,Ontario**
  emergency stabilization
  Stone church built in 1848 by Underground Railroad refugees associated with Bishop Willis Nazery.
- **St.Anne's Anglican Church, Toronto,Ontario**
  roof replacement
  Contains paintings executed in 1923 by ten prominent artists, including three of the Group of Seven.

Toward a More Effective National Cost-sharing Program

The National Cost-sharing Program has been extremely successful. Indeed, its very success has created a problem. The requests for assistance from eligible sites far exceed the program's ability to deliver: there is now a backlog of 66 applicant sites. To address this challenge, the program underwent a third-party review in 1998, followed by a series of proposals to both expand its reach and make it more equitable and responsive. Currently, these proposals are being integrated into a revised cost-sharing program.

The Status of Management Plans and Commemorative Integrity Statements for National Historic Sites of Canada

The commemorative integrity statement is the starting point and cornerstone for the management of any national historic site. Over the past four years, Parks Canada has focused its attention on the development of commemorative integrity statements for all the national historic sites it administers. To date, over half these sites have either a completed or draft statement in place. It is an impressive start, but the application of this dynamic concept remains a relatively new idea and it continues to be refined. To this end, an initiative is currently underway to revise the *Guidelines for the Preparation of Commemorative Integrity Statements*. Drawing on the collective experience of staff and partners from across the country, these revised guidelines will build on past successes and address some of the problems that the program has encountered in applying commemorative integrity to specific site situations. Once completed, the guidelines will be available to all national historic site managers regardless of ownership.

Building on the values and objectives stated in the commemorative integrity statement, the

Grosse-Île and the Irish Memorial,a national historic site administered by Parks Canada

management plan articulates specific strategies to ensure the commemorative integrity of the site. This document also serves as the Minister's public commitment to Canadians on the protection, presentation and use of that site.

While Parks Canada has developed management plans for numerous national historic sites in the past (Appendix 4), there is now a statutory obligation to do so in the *Parks Canada Agency Act* (1998). The agency is now required to provide the Minister with a management plan for tabling in the House of Commons five years after the establishment of any new national historic site. All other sites are required to have a management plan prepared for tabling in the House of Commons by 2003. This is a significant new challenge for Parks Canada and the 144 national historic sites it administers. Since the 1997 Report, nine plans have been completed, 22 are in the draft stage, with an additional 62 scheduled for completion by 2002.

Measuring Commemorative Integrity at Twelve National Historic Sites of Canada

The *Parks Canada Agency Act* (1998) states that *it is in the national interest to ensure the commemorative integrity of national historic sites of Canada.*

Since its development in 1994, the commemorative integrity statement has become a valuable planning and management tool for national historic sites. The indicators contained in the statement form the basis for an evaluation of the state of protected heritage areas as well as an assessment of a site's management practices.

A Report on Twelve National Historic Sites of Canada: Measuring Commemorative Integrity

The *State of the Parks 1997 Report* was the first time that commemorative integrity was used as a yardstick to report on the state of individual national historic sites. This year's report reviews the progress of the eight sites assessed in 1997 as well as four others.

These 12 sites provide a good representation of the diversity of national historic sites across Canada. Geographically, they span the country. The time frame they represent covers nearly 500 years of the nation's past. Some are located in southern Canada while others are far removed from major population centres. Their stories tell of immigration and deportation, the fur trade, the clash of cultures, great feats of engineering, a gold rush and skiing in the Rocky Mountains. Their physical size ranges from sites that consist of little more than a single dwelling to large complexes with many buildings. One of the largest is a 200-km transportation corridor. Each one represents a significant aspect of Canada's history. Each one also presents particular management challenges for ensuring commemorative integrity. They are listed below.

- **Batoche**
  A Métis village and the site of the 1885 Battle of Batoche on the South Saskatchewan River midway between Saskatoon and Prince Albert
- **Dawson Historical Complex***
  Buildings from Dawson's early history associated with the search for gold in the Klondike, Dawson City, Yukon Territory
- **Fort Langley**
  A nineteenth-century Hudson's Bay Company post on the Fraser River, 48 km east of Vancouver
- **Fort Témiscamingue**
  The remains of a fur trading post dating from the seventeenth and eighteenth centuries in northwestern Quebec, six km south of Ville-Marie

- **Grand-Pré**
  A site associated with Acadian settlement and the Deportation of 1755,near Wolfville, Nova Scotia
- **Grosse-Île and the Irish Memorial***
  The immigrant quarantine station from 1832 to 1937, on an island in the St. Lawrence River, 46 km downstream from Québec City
- **Prince of Wales Fort**
  An eighteenth-century masonry fortification associated with the fur trade at the mouth of the Churchill River on Hudson Bay near Churchill,Manitoba
- **Red Bay***
  A site containing extensive and outstanding archaeological remains from the sixteenth-century Basque whaling industry on the southern Labrador coast near the north end of the Strait of Belle Isle
- **Rideau Canal***
  A remarkable survival from the nineteenth century, an operational canal 202 km long in eastern Ontario connecting Ottawa and Kingston
- **Rocky Mountain House**
  The remains of rival Hudson's Bay Company and North West Company posts on the shores of the North Saskatchewan River near the town of Rocky Mountain House, Alberta
- **Sir John Johnson House**
  A late eighteenth-century house associated with Sir John Johnson and Loyalist immigration to Upper Canada in Williamstown, Ontario
- **Skoki Ski Lodge**
  A 1930s rustic ski lodge in Banff National Park,Alberta

* These sites were not included in the *State of the Parks 1997 Report.*

The Commemorative Integrity Reporting Table

This table on page 51 details the state of the 12 sites. As in the *State of the Parks 1997 Report*, the table reports on the state of commemorative integrity by means of 19 key indicators divided into three general categories: resource condition, effectiveness of communication and selected management practices. The measurements are based on the concept of the traffic signal. Green, yellow and red lights are universally understood and are intended to make meaningful comparisons possible between both sites and indicators. Differences between a green light (the desired state) and the actual state are indicated by either a yellow light (some discrepancy) or a red light (significant discrepancy). More specific information on the rating system is provided in the legend at the bottom of the table.

Results: Reading the Commemorative Integrity Reporting Table

Overall, the reporting table shows improvements in all three general categories from what was reported in 1997. These improvements indicate that the concept of commemorative integrity is being applied as an effective management tool. For most national historic sites of Canada assessed here, indications are that the application of the concept of commemorative integrity is showing positive results.

Resource Condition

This section deals with the condition of the sites' heritage resources. These ratings focus on the historic value of the particular resource. For example, if the resource consists of a vestige – a chimney and the remains of a foundation – it is assessed accordingly. Similarly, a heritage structure would not be given a red rating just because it did not meet current building code specifications.

A review of the "Resource Condition" category shows that a number of the sites contain numerous resources of a single type. This often requires some generalization in the condition assessment. Grosse-Île and the Irish Memorial, for example, has more than 30 nationally significant buildings on the site whose condition ranges from good to poor. As a result, it receives a yellow light to reflect this range. The up arrow (↑) beside the light indicates that remedial action is planned or, as in this example, is underway to address the impairments.

Summary of Results for Resource Condition

Three sites report that their heritage resources are in a good state overall (green); eight others are in the

fair range (yellow) and one, Skoki Ski Lodge, remains seriously impaired. A good indication of progress toward commemorative integrity is that four of the eight sites from 1997 indicate that remedial action has resulted in an improvement of their overall condition rating. None of the sites had their overall rating lowered from the 1997 assessment.

Of the four new sites reporting this year, three report their overall condition assessment as "fair" and one as "good." Two sites, Dawson Historical Complex and the Rideau Canal, indicate that their respective "designated places" are under threat because of change or potential change in areas beyond their jurisdictional limits. Sites such as these, which derive much of their value from being an integral part of larger, functioning communities, face the recurring problem that outside development may threaten some of their most significant resources and values. Management at such sites must rely on education and cooperative work with stakeholders in the larger community to ensure the commemorative integrity of the site.

Effectiveness of Communications

Measuring the effectiveness of heritage presentation is a critical step in assessing the state of commemorative integrity at a national historic site of Canada. Generally, this effectiveness is measured in three ways: 1) audience understanding of the messages; 2) audience satisfaction; and 3) audience utilization of the presentation programs, publications and media. Measuring the last two parts is usually straightforward; evaluating an audience's understanding of the messages is more complex. For example, a number of sites report that visitor surveys indicate a high level of satisfaction with the interpretative programs offered. These same sites acknowledge, however, that most visitors surveyed cannot identify what is nationally important about the place following a visit. This lack of understanding calls into question both the effectiveness of the presentation program and the measurement techniques employed.

Currently, most sites measure the effectiveness of their communications by using a standardized client survey card. While these surveys are an important tool for collecting a variety of information, they are not designed to assess audience understanding of the site's primary messages accurately. Considering that effective communication is an integral component of commemorative integrity, an accurate measure of audience understanding is crucial matter and one that requires more attention. Some preliminary work to address this challenge is underway; for details see Heritage Presentation in Chapter Three.

Note: As in 1997, the "Effectiveness of Media" and "Audience Understanding" indicator columns in the table are reported as "N/R" (not reported) unless the site had specific, reliable survey data available.

Summary of Results for Effectiveness of Communications

This category was the most disappointing and problematic in the *State of the Parks 1997 Report:* four of the eight sites reported serious deficiencies (red) in their overall communication work as well as under the key indicator of the communication of "national significance." Three sites reported some impairments (yellow) and only one site had an overall rating of good. As the 1997 Report noted, the results were cause for concern.

The 1999 results provide evidence of improvement but there is still cause for concern. Of the eight sites reviewed from 1997, only two continue to report serious impairments overall (red), four indicate moderate problems in their communications (yellow) and two rate as good (green) overall. Of the four new sites, two are green, one yellow and one red.

The situation of Fort Témiscamingue requires clarification. This national historic site of Canada has been closed to the public since May 1998 because of a land claims issue. Because the site has been closed through 1999 and hence unable to communicate its messages of national significance, it receives a red rating. Fort Témiscamingue, however, has made considerable progress at in developing new interpretation strategies and programs which will be in place when the site reopens.

One problem that remains from 1997 is that two sites, Batoche and Grand Pré, continue to have serious impairments under the indicator "Range and Complexity of Perspectives Presented." The national significance of these sites deals with highly controversial subjects and their interpretative programs tend to emphasize only one perspective. This imbalance derives in part from the direction of recent historiography and also from the views of their respective local community. Parks Canada, however, is required to present the range and complexity of human history commemorated at a national historic site, not just the current or popular view. The red rating indicates that differing historical perspectives are not presented in a balanced fashion. It is important to note that both sites plan to address the imbalance in their current presentation programs.

The communication problem at Grosse-Île and the Irish Memorial is somewhat different. This site faces the challenge of communicating three major themes of national significance associated with immigration. To date only one of the three has been addressed adequately in the site's heritage presentation program. This accounts for the red ratings in the "Effectiveness of Communications" category. Again, it should be noted that the site has specific plans to broaden it presentation and incorporate the additional themes.

Selected Management Practices

Cultural resource management is based on the premise that if sound management principles and practices are in place, the decisions made and actions taken will contribute to the achievement of commemorative integrity. Over time, good conservation and effective communications depend on the solid foundation of good management.

The Parks Canada Cultural Resource Management Policy describes some 60 management actions and practices necessary to ensure sound cultural resource management. It would be impractical to report on all of these, so five practices have been selected as indicators of the state of cultural resource management for national historic sites of Canada.

Inventory and Cultural Resource Evaluation

The first and fundamental management requirement at a national historic site is that all the site's cultural resources be identified and their historic values defined. These values must be articulated so the resources can be managed accordingly. This practice includes the whole site covered under the designation as well as the component parts.

Respect for Cultural Resource Management Principles and Practice

Cultural resource management considerations must be factored into all decision-making.

Records (Archaeology)

Ideally, this indicator should cover all site records dealing with cultural resources but, as was the case in 1997, this report addresses archaeological records only.

Maintenance Programs

This indicator assesses the extent to which ongoing maintenance programs are an integral part of the management of the site's cultural resources.

Monitoring and Remedial Action

This indicator assesses the degree to which critical matters like resource condition and effectiveness of communication are monitored, and whether remedial actions are taken to address deficiencies identified as a result of monitoring. State of protected heritage area reporting can be considered a form of monitoring.

Summary of Results of Selected Management Practices

This category reveals the most impressive results of the three. Five sites are rated overall as having only minor impairments in this category, with the remaining seven sites reporting a good or green status.

Commemorative Integrity Reporting Table

	Batoche		Fort Langley		Fort Témiscamingue		Grand-Pré		Prince of Wales Fort		Rocky Mountain House		Sir John Johnson House		Skoki Ski Lodge		Dawson	Grosse-Île	Red Bay	Rideau Canal
RESOURCE CONDITION																				
Overall	●	–	●+	↑	●+	↑	●	↑	●	–	●	–	●	↑	●↑	–	●	●	●	●
Resources Related to National Significance	●	–	●+	↑	●	–	●	–	●	–	●	–	●	↑	●↑	–	●	●↑	●	●
Other Cultural Resources	●	–	●+	↑	●	↑	●	↑	●+	–	●	–	●	↑	●	–	●	●	●	●
Cultural Resource Types:																				
• Designated Place	●	–	●	–	●↓	–	●	↑	●	–	●	–	●	–	●	–	●↑	●	●	●↓
• Landscape Features	●	–	●	–	●+	↑	●	↑	●	–	●	–	●	–	●	–	●	●↑	●	●↓
• Buildings,Structures	●↑	↓	●	–	●	↑	●	↑	●	–	●	–	●	–	●↑	↑	●↓	●↑	N/A	●
• Archaeological Sites	●	–	●	–	●	↑	●	–	●	–	●-	↓	●	–	NR	N/A	●	●	●	●
• Objects	●+	↑	●	↑	●	↑	●	–	●	–	●	↑	●	–	●↓	–	●	●	●↓	●
Other Heritage Resources (e.g.,natural)	●	–	N/A	–	N/A	–	N/A	–	●	–	●+	↑	N/A	–	●	–	NR	●	●	●
EFFECTIVENESS OF COMMUNICATIONS																				
Overall	●	–	●	↑	●	↓	●↑	–	●	↑	●–	↑	●	↑	●	–	●	●↑	●	●
National Significance	●-	–	●	↑	●	↓	●↑	–	●	–	●+↑	–	●+	↑	●	–	●	●↑	●	●↑
Other Heritage Values	●-	–	●	↑	●	↓	●	–	●	–	●+	↑	●	↑	●	–	●↑	●-	●	●
Effectiveness of Media	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	●	NR	NR
Audience Understanding	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	–	NR	●	NR	NR
Range and Complexity of Perspectives Presented	●↑	–	●	↑	●	↓	●↑	–	●	↑	●+	↑	●	–	N/A	–	●	●↑	●	●+
National Historic Site General Values	●+	↑	●	↑	●	↓	●+	↑	●+	↑	●+	↑	●	↑	●	–	●	●	●	●
SELECTED MANAGEMENT PRACTICES																				
Overall	●	–	●	↑	●	↑	●	–	●	↑	●+	↑	●+	↑	●	–	●	●	●	●+
Inventory and Cultural Resource Evaluation	●+	↑	●+	↑	●+	↑	●	–	●	↑	●	–	●	–	●-	↓	●	●	●↓	●
Respect for Cultural Resource Management Principles and Practices	●	–	●	–	●	↑	●	–	●	–	●	–	●	↑	●	–	●	●	●	●
Records (Archaeology)	●	↑	●	–	NR	–	●	–	●	–	●	–	●	–	NR	–	●	●	●	●
Maintenance Programs	●	–	●	↑	●	–	●	–	●	–	●+	↑	●+	↑	●	↓	●	●	●	●
Monitoring and Remedial Action	●	–	●	↑	●	↑	●+	↑	●+	↑	●	↑	●+	↑	●	–	●	●	●	●

LEGEND – The Symbols

The coloured dots in the left-hand column under the first eight sites are intended to represent traffic signals. **They refer to the actual state of the site at the time the assessment was done (August-September 1999).**

- Green means good,effective or not currently impaired.Indicators shown in green are not a threat to the commemorative integrity of the site although there may be minor impairments present.
- Yellow means fair, acceptable,or minor impairment or threat.Requires minor improvement.
- Red means poor, ineffective,seriously impaired or a significant attribute missing (whether related to condition,communications or selected management practices).

"N/A" means not applicable.

"NR" means not rated or not reported on.

Plus (+) or minus (–) means the actual state is on the high or low borderline side of the colour.

An arrow used in conjunction with a coloured dot refers to a current trend but is not part of the measure of the current condition or state of effectiveness.

Under the right-hand column for each of the first eight sites:

↑ An up arrow indicates that the current condition or level of effectiveness has improved measurably from the 1997 Report.

– No measurable change since the 1997 Report.

↓ A down arrow indicates that the current condition or level of effectiveness has deteriorated measurably since the 1997 Report.

THE UNDERGROUND RAILROAD INITIATIVE

The "Underground Railroad"was a term used to describe the nineteenth-century clandestine network that helped runaway slaves make their way north to the free states or Canada. Some 20,000 African-American refugees settled in Canada between 1820 and 1860,primarily in southern Ontario.

Beginning in 1995, Parks Canada staff have worked with members of the United States National Park Service,representatives from Underground Railroad sites and museums,and staff from the Canadian Identity Sector, Department of Canadian Heritage,on a project to identify, commemorate and support various aspects of the Underground Railroad history. Highlights of accomplishments to date are listed below.

- A study tour of several Underground Railroad sites in the United States and Canada in 1997.
- Signing of a memorandum of understanding between Parks Canada and the United States National Park Service committing both to a number of projects,including the Underground Railroad Joint USNPS/Parks Canada Initiative,May 1998.
- In February 1999,the designation by the Minister, on the recommendation of the Historic Sites and Monuments Board of Canada,of two new national historic sites related to the Underground Railroad in Canada:the Buxton Settlement,near Chatham,Ontario and the Nazrey African Methodist Episcopal Church,Amherstburg,Ontario.The Minister also designated Thornton and Lucie Blackburn as persons of national historic significance because of their association with Underground Railroad settlement.
- Also in February 1999,inclusion of associated Underground Railroad themes at the following national historic sites of Canada: Fort Malden in Amherstburg, Fort George in Niagara-on-the-Lake,and Osgoode Hall,St.Lawrence Hall and George Brown House in Toronto.
- Financial contribution by Parks Canada toward emergency conservation work at the Nazrey African Methodist Episcopal Church.
- Formation of the Underground Railroad network of sites in southwestern Ontario,with the assistance of the Canadian Identity Sector, Multiculturalism Program. Parks Canada's Fort Malden National Historic Site participates as an associate member. The network intends to coordinate and improve conservation,presentation,information sharing and marketing of Underground Railroad sites nationally and internationally.
- Production of a guide to Underground Railroad sites in the United States and Canada, to be published in 2001 by the United States National Park Service and Parks Canada in cooperation with the National Tour Association.

Federal Heritage Buildings

Our architectural heritage enriches our communities, tells us about our past and present, and strengthens our sense of identity. As the largest property owner in Canada, the federal government plays a key role in ensuring the ongoing protection of the country's architectural heritage. Recognizing the importance and irreplaceable nature of this heritage, the federal government adopted the Federal Heritage Buildings Policy in 1982, which was issued as a real property administrative policy by

Before and after photos of emergency conservation work at the Nazrey African Episcopal Church in Amherstburg,Ontario

the Treasury Board in 1987. Under this policy, federal departments must acquire, use and dispose of buildings in a way that protects their heritage character.

Parks Canada is responsible for the Federal Heritage Buildings Review Office, which helps departments determine the heritage status of their buildings. With the assistance of an interdepartmental committee made up of representatives of the custodian departments, the Office evaluates a building's heritage value through the application of internationally recognized criteria. Depending on the final assessment, the building may be designated as either "classified," the higher level of significance, or "recognized" by the Minister. Since the inception of the policy in 1982, 6,332 federal buildings have been evaluated, of which 277 have been designated "classified" and 1,138 "recognized." The number of buildings evaluated and designated since the *State of the Parks 1994 Report* are listed in the table below.

Federally Owned Buildings	Totals Reported 1982-1994	Totals Reported 1995-1999	TOTAL
Number Evaluated	**4,514**	**1,818**	**6,332**
Designated Classified	223 (5%)	54 (3%)	277 (4%)
Designated Recognized	887 (20%)	251 (14%)	1,138 (18%)
Not Designated	3,404 (75%)	1,513 (83%)	4,917 (78%)

There are now 265 classified and 1,046 recognized federal heritage buildings in the inventory. To put these numbers in context, the federal government administers 57,104 buildings. Designated structures represent just 2.3 percent of the government's holdings.

To date, just over ten percent of the federal inventory of buildings has been evaluated and many of the remainder may never be examined. Buildings less than 40 years of age are exempt, as are those owned by crown corporations and agencies. As a result, important buildings like post offices currently are not offered any protection under the Policy.

Federal heritage buildings are located in 321 communities across Canada. They include the Coffin Island Lighthouse in Nova Scotia,

The Grande Allée Drill Hall, Québec City, a federal heritage building

the Grande-Allée Drill Hall in Québec City, the Parliament Buildings in Ottawa, the Yorktown Armoury in Saskatchewan, the Banff Park Museum in Banff National Park and the Dominion Astrophysical Observatory in Victoria. In addition to contributing to the heritage fabric of their communities, federal heritage buildings ensure a continued federal presence in large and small centres across Canada.

The responsibility for the continued care of federal heritage buildings is shared among 23 departments, crown corporations and agencies. Parks Canada administers the largest number of federal heritage buildings: 122 classified and

The Point Abino Light Tower, Lake Erie, Ontario, a federal heritage building

365 recognized. Other important custodians of federal heritage buildings include the Department of National Defence (55 classified and 231 recognized), the Department of Public Works and Government Services Canada (35 classified and 142 recognized), the Canadian Coast Guard (18 classified and 107 recognized) and the National Capital Commission (nine classified and 61 recognized).

The Federal Heritage Buildings Review Office provides custodial departments with assistance in the review of proposed interventions that might affect the heritage character of designated buildings. If such a building requires repairs or modifications, the custodian must seek advice on the best way to protect its heritage character. Over the last five years, the Office has provided advice on more than 600 interventions for a variety of buildings ranging from national monuments like the Parliament Buildings and the Supreme Court in Ottawa to the Green Armoury at Canadian Forces Base Gagetown, New Brunswick.

Current Trends

Since the *State of the Parks 1994 Report*, there has been a major increase in the disposal of designated buildings. This is largely due to government downsizing since the mid-1990s. Many federal buildings were declared surplus to requirements and were either disposed of – through transfer or sale – or demolished. To date, 79 federal heritage buildings (5.6 percent of the total number of designated buildings) have been sold or transferred. An additional 26 federal heritage buildings (1.8 percent of the total) have been demolished, almost two-thirds of them since 1994. There is concern that these numbers may increase over the next few years as federal government disposal efforts continue.

Federal Heritage Railway Stations

The *Heritage Railway Stations Protection Act*, proclaimed in 1990, affirms the federal government's commitment to the preservation of this part of the country's built heritage. Parks Canada is responsible for administering the Act.

Under the Act, a heritage railway station is one designated as such by the Minister of Canadian Heritage on the recommendation of the Historic Sites and Monuments Board of Canada. The Act requires federally regulated railway companies to obtain authorization from the Governor in Council before removing, destroying, altering or disposing of a heritage railway station and before altering any of the heritage features of the station. It also allows for public involvement in opposing those interventions that are seen as potentially deleterious to a heritage railway station or its heritage features. Parks Canada ensures compliance with the Act, which provides for heavy fines for infractions.

Last reported on in the *State of the Parks 1994 Report*, this conservation initiative has been highly successful. The evaluation of the eligible railway stations across the country was completed in 1997. The number of railway stations evaluated and designated under the *Heritage Railway Stations Protection Act* is summarized below.

Railway Stations	Totals 1988-1994	Total 1994-1999	Total
Evaluated	205 *	91	296
Designated Heritage	137 [67%]	39 [43%]	176 [60%] **

* This figure was reported incorrectly as 216 in the *State of the Parks 1994 Report.*

** Of this total,six stations have been damaged or destroyed by fire and 52 have been sold or are proposed for sale.

The Saskatoon Railway Station,a federal heritage railway station

Since 1994, Parks Canada has monitored compliance with regulations under the act, reviewed proposed interventions and ensured that work is carried out in conformity with terms and conditions authorized by the Governor in Council. When a designated railway station is sold to a party not subject to the act, Parks Canada encourages the province or territory within which the station is situated to apply its historic resource protection legislation to the station. In fiscal year 2000-2001, Parks Canada will develop and implement a more formal process for monitoring the heritage condition of designated stations.

National Program for the Grave Sites of Canadian Prime Ministers

Concern for the long-term care and conservation of the grave sites of the country's prime ministers led the Government of Canada to introduce a program designed to protect and honour the final resting places of Canada's past leaders. The National Program for the Grave Sites of Canadian Prime Ministers was announced by the Minister of Canadian Heritage in November 1998 and launched in February 1999. Parks Canada is responsible for the program.

The program's primary objective is to ensure that the grave sites of Canada's former prime ministers are preserved in a respectful way. A second objective is to provide Canadians with information on the lives and accomplishments of our past prime ministers and to make Canadians aware of their burial places. The program involves

- developing conservation plans, implementing landscape improvements, mounting an information plaque and installing a Canadian flag at the grave sites;
- organizing ceremonies at each cemetery to commemorate the prime ministers buried there;
- producing a booklet highlighting the contributions of each prime minister; and
- developing a program website that provides relevant information and links to other related sites.

Parks Canada has consulted with family representatives and cemetery officials to ensure that all aspects of the program are supported and implemented in a sensitive way. The public response has been positive: demand for the booklet has necessitated a fourth printing, individual ceremonies have been well attended, the program has generated extensive media coverage and the website has received numerous visits.

To date, eight ceremonies have been held for the following prime ministers: Sir John A. Macdonald, Alexander Mackenzie, Sir Mackenzie Bowell, Sir Robert Laird Borden, Sir John Sparrow Thompson, Sir Charles Tupper, Arthur Meighen and William Lyon Mackenzie King. Ceremonies for the remaining five who are buried in Canada* are scheduled for 2000-2001. They are Sir Wilfrid Laurier, Sir John Joseph Caldwell Abbott, Louis Stephen St-Laurent, John George Diefenbaker and Lester Bowles Pearson.

** The sixth,R. B. Bennett,is buried in Surrey, England.*

3. ENGAGING CANADIANS

INTRODUCTION

THE NATIONAL PARKS, NATIONAL HISTORIC SITES AND NATIONAL MARINE CONSERVATION AREAS OF CANADA BELONG TO ALL CANADIANS. THESE HERITAGE PLACES ARE THEIRS TO APPRECIATE, UNDERSTAND, ENJOY... AND PROTECT. UNDERSTANDING OF THE IMPORTANCE OF CANADA'S HERITAGE TO THE NATION AND THE WORLD, AND SUPPORT FOR ITS PROTECTION ARE IN FACT CRITICAL TO THE LONG-TERM HEALTH OF THIS SYSTEM OF SPECIAL PLACES.

From Awareness to Involvement

Parks Canada cannot protect or conserve all the areas identified as important representatives of Canada's history and natural environments on its own. For that reason, the agency has developed and implemented external communications and education activities that encourage Canadians to experience and understand the heritage of these places, and to nurture a sense of shared responsibility for their protection among all Canadians.

The more Canadians know about Canada's national parks, national historic sites and national marine conservation areas, the more they are motivated to support their protection. As visitors, they should seek out activities and heritage experiences that result in minimum impacts on the heritage resources. As stakeholders and partners, they should become more approachable and cooperative. As concerned citizens, they should be inspired to act on Parks Canada's behalf as individuals, volunteers, members of cooperating associations and private organizations, or part of other public agencies.

What Canadians Have Told Us

Since the last *State of the Parks 1997 Report,* public polling and surveys conducted in 1998 and 1999 have provided insight into the relationship between Canadians and the network of national parks and national historic sites of Canada. A sampling of results and conclusions follows.

Values

Canadians rank the national parks of Canada and the national historic sites of Canada as the nation's most important symbols after the national anthem and the flag. When asked to rank the importance of the roles Parks Canada plays in relation to national parks, Canadians placed "preserving and protecting the natural environment within existing national boundaries" first, "creating new national parks of Canada to protect ecologically significant areas" second and "provision of educational and recreational opportunities" third. Overall, more than 92 percent say that it is important to preserve Canada's heritage and over 90 percent find Canadian history

interesting. Moreover, the record of our past is important to young people — and their interests include not just history and culture, but geography and ecology as well.

Visitor Satisfaction

Canadians have indicated that visiting a national historic site or a national park is a preferred way to learn more about their country and experience their heritage directly. From 1997 to 1999, the percentage of satisfied national park and national historic site visitors ranged from 79 to 99. Overall, Parks Canada met or exceeded its 85% visitor satisfaction standard in 93% of the surveys over the course of that period.

Knowledge about the National Systems

Canadians in general know little about the system of national parks and the system of national historic sites that spans the country. For example, four in 10 Canadians could name a canal or waterway, such as the Lachine Canal or the St. Lawrence River, while one in 10 associated them with a sense of history. Thus the largest single predicament facing the national parks and the national historic sites of Canada is a lack of public awareness. At the same time, despite their limited current knowledge, Canadians say they want to learn more about their heritage.

To most Canadians, the phrase "national historic site of Canada" evokes either a specific location or elicits a general sense of historical significance. The term "national park of Canada" prompts one in four to think about protection of wildlife, while one in five thinks of a specific national park. Natural scenery and unspoiled wilderness place third and fourth, followed by protection of an area. "National marine conservation area of Canada" evokes the idea of protection of water environments like oceans, lakes and other bodies of water, as well as the wildlife and sea life in those ecosystems.

Overall, Canadians are proud of the national historic sites and the national parks of Canada, but they feel they do not know enough about the diversity of their national heritage and want to learn more about it. These results confirm that Parks Canada must continue its efforts in raising awareness and understanding of Canada's system of heritage places through a diverse array of external communications and learning initiatives.

THE NATIONAL HISTORIC SITE CHALLENGE

Studies show that the national historic sites of Canada suffer from a lack of public awareness.Many Canadians do not know of the existence of more than 800 national historic sites of Canada or that they are a part of an extensive national system. Surveys have confirmed that a large percentage of Canadians were unaware of the purpose of these places of national historic significance. Many felt,however, that their exposure to the national historic sites of Canada had improved their knowledge of these heritage places and given them a greater appreciation of Canada's varied cultures.

In response, Parks Canada is taking action to draw attention to the national historic sites of Canada through external communications,media and education products,and related activities. Parks Canada is also working to raise the profile of the national historic sites of Canada in the minds of Canadians, international travellers and the travel industry, and fostering the discovery of less well-known national historic sites of Canada.

Raising Awareness to Develop a Common Understanding

The basis for shared responsibility and active involvement is common understanding. For the long-term benefit of the national parks, national historic sites and national marine conservation areas of Canada, Parks Canada must convey the crucial importance of its mandate to protect these heritage places while fostering their appreciation, understanding and enjoyment by all Canadians.

If the national parks of Canada are to continue protecting the nation's wilderness places, their ecological integrity must remain intact — that is, the structure and function of their ecosystems, with their various wildlife habitats, should be kept unimpaired by human activity both now and in the future. Similarly, if national marine conservation areas of Canada are to protect marine environments, conservation objectives within their borders must continue to be harmonized with ecologically sustainable use. And if the national historic sites of Canada are to preserve their cultural legacy, their commemorative integrity must be ensured — they should be healthy and whole, not under threat, and managed in a way that will maintain them in this state while their national significance is communicated.

To achieve these objectives, Parks Canada has delivered awareness initiatives with a reach of more than 2.5 million over the past two years. These initiatives have helped Canadians comprehend and support Parks Canada's protection and preservation mandate, understand the national system of heritage places, and appreciate and enjoy the national parks and the national historic sites of Canada in a responsible, sustainable manner.

The Parks Canada Awareness Initiative 1999

Messages

Targeting three main audiences — baby boomers, mature Canadians and youth — the awareness-raising strategies developed by Parks Canada focus on three key message areas described below.

1. Values and Benefits of the Systems of Heritage Places

To improve the level of knowledge about Canada's system of heritage places, current awareness activities aimed at Canadians stress that the national parks and the national marine conservation areas of Canada have been established to represent clearly identified land and marine environments. They also explain that the national historic sites and the national historic canals of Canada have been designated to commemorate nationally significant aspects of the nation's past. The objective of these activities is to convey the notion that each component of Canada's national system of special heritage places contributes a unique significance to the country's environment and culture.

2. Ensuring Ecological and Commemorative Integrity

At the heart of Parks Canada's mandate is the need to ensure ecological integrity in the national parks of Canada, commemorative integrity in the national historic sites of Canada and ecological sustainability in the national marine conservation areas of Canada. Awareness activities related to these key concepts highlight the fact that Parks Canada is the steward and protector of the national parks, the national marine conservation areas and the national historic sites of Canada. They stress that a continually growing knowledge and science base helps Parks Canada act to protect the heritage places in its care from the threats and stressors that challenge their ecological integrity and

commemorative integrity. In addition, they inform Canadians that Parks Canada is actively managing visitor use in support of its ecological and commemorative protection objectives.

3. Opportunities for Appreciation, Understanding and Enjoyment

The national parks, national historic sites and national marine conservation areas of Canada are dynamic symbols of the nation and the Canadian identity. They are intended for all Canadians — to be appreciated, understood and enjoyed. Awareness activities are focused on making visitors more aware, informed and sensitive to the special nature of these places. The objective is for visitors to make appropriate use of the environment, services and facilities provided at these special places, and to participate in the educational programs offered.

On-site Experiences

Every year, the national parks, national historic sites and national marine conservation areas of Canada receive millions of visitors who arrive to experience the special nature of these heritage places. Meeting visitors' expectations and activity interests while protecting the natural and cultural resources that attract people is an ongoing challenge. Yet visits, which bring audiences in direct contact with Parks Canada staff, provide excellent opportunities for communication and education.

When visitors are aware, informed and sensitive, they can benefit from a high-quality experience while supporting Parks Canada in its goals of achieving ecological and commemorative integrity, as well as ecologically sustainable use. Awareness of the special nature of a national park, a national historic site or a national marine conservation area of Canada, along with appropriate use of the environment, services and facilities provided, and participation in the educational programs offered, are intended to link visitors with Parks Canada's values, and foster understanding and support for the application of sustainable tourism principles.

Off-site Discovery

Visiting the national parks, the national historic sites and the national marine conservation areas of Canada is no longer the only way to experience their richness and learn about their diversity. Over the past decade, Parks Canada has explored the use of new technologies that, coupled with traditional means of communicating, has opened new horizons for reaching out to Canadians and international guests of all ages.

Off-site discovery approaches are used to raise awareness of Canada's systems and mandate among audiences who may not have the opportunity to visit the national parks, national historic sites and national marine conservation areas of Canada. Off-site discovery aims to create understanding and support in these new audiences and to motivate active involvement on their part with these heritage places — as individuals, volunteers, or members of private organizations.

Since 1997, Parks Canada has increased its off-site awareness and discovery programming significantly.

Television and Video

During the summer of 1998, a 60-second commercial entitled "Parks Canada Coast to Coast" was aired on national television. In the spring of 1999, a 90-second video on the national system of heritage places managed by Parks Canada was shown at cinemas across Canada, with additional showings at the Pan-Am Games, reaching more than 400,000 viewers.

A recent study reported that nearly one-half of those surveyed thought that specialized television was an excellent way to learn about our natural and cultural heritage and that for one-third, television was a preferred means of learning.

For the past five years, Parks Canada has been involved in television documentaries as well as high-profile projects with the private sector. *The Great Canadian Parks* television series,

now entering its fifth season, highlights six to eight national parks of Canada each season and is broadcast nationally on the Discovery Channel and various regional networks across the country with a reach of over 6 millions viewers. *History Lands*, with an audience of 1.5 million, documents 13 national historic sites of Canada each season and is entering its third season on History Television. Both series are available in schools and libraries, and are being marketed internationally. *Histoire Max*, a French-language series aimed at the youth market, includes stories on several national historic sites of Canada that deal with the francophone heritage. It is entering its second season on TFO, the Ontario francophone public broadcaster.

The Internet

Recent surveys confirm that increasingly, a large percentage of Canadians think of the Internet as an "excellent" way to learn about our natural and cultural heritage. In response, the Parks Canada website, which seeks to educate and promote knowledge of Canada's network of heritage places, continues to expand its information and educational content targeting Canadian and international audiences. In 1999, it attracted about 1,864,000 visitors who browsed some 14 million pages. E-mail requests for information have continued to grow as well.

Canadians find the Parks Canada website user-friendly and information on the national parks of Canada and the national historic sites of Canada accessible. Heavy and repeat use has created a demand for increased communication. Accordingly, Parks Canada updates the site regularly and monitors e-mail feedback to ensure that the information needs and interests of Internet users are met.

Two recent website additions have helped raise awareness of the nation's system of heritage places, in particular the national historic sites of Canada. "This Week in History" has featured a Canadian historic event of national significance every week since 1998."Virtual Tours" offer armchair picture, video and audio tours of more than 120 national parks and national historic sites of Canada, including some national historic sites of Canada not administered by Parks Canada.

Travelling Exhibits

Parks Canada's national travelling exhibits circulate among an average of 10 Canadian cultural institutions annually. Educational as well as entertaining, they cover a wide range of themes and bring Parks Canada experiences and issues to varied audiences across the country.

Each national park, national historic site and national marine conservation area of Canada also features an exhibit that presents the national system.The exhibits, designed to motivate visitors to explore Canada's heritage places, show viewers the geographic variety and the range of heritage experiences they offer.

Targeted Print Media

In 1998 and 1999, Parks Canada cooperated with the Heritage Network in a project to publicize Canada's historical heritage through Canada's newspapers. Professional journalists were hired to write articles on national historic sites of Canada and the people, places and events connected to them. These articles, distributed to newspapers across the country, have been featured in newspapers like *The Toronto Star*, *The Brandon Sun* and *The Sherbrooke Record*, reaching a potential readership of more than 2.5 million.

One-page articles on national heritage places administered by Parks Canada have appeared in *Owl Magazine* and *Les Débrouillards*. These educational magazines target youth aged 8 to 13 and reach over 100,000 readers annually. A partnership with *Owl Magazine* in 1998-99 resulted in a series of 10 "Canadian Stories" for children featuring

broad themes like "Peopling the Land," "Developing Economies," and "Expressing Intellectual and Cultural Life." Two million copies are now in distribution at national parks and national historic sites of Canada. These stories are also offered to teachers and school groups across the country.

Heritage Renewal

Heritage presentation is public education through both interpretation and outreach. One of the principal means of contact between Parks Canada and both visitors and nonvisiting publics, it is critical to fostering understanding through knowledge and learning experiences in and about Canada's national parks, national historic sites and national marine conservation areas.

Restructuring initiatives under federal government program reviews in the 1990s reduced Parks Canada's interpretation and outreach educational programming at many national parks and national historic sites of Canada. Parks Canada's ability to "tell the story" of Canada through its nationally significant heritage places became seriously eroded by downsizing, cutbacks and organizational restructuring.

At the same time, stakeholders and visitors signalled that heritage presentation is a key and valued element of Parks Canada's mandate. It was also a service they expected to benefit from as an integral part of a visit to a national park or a national historic site. This feedback, together with a third-party review of the state of Parks Canada's heritage presentation function, initiated a system-wide process of heritage presentation renewal.

The result was the 1998 *Action Plan for the Renewal of Heritage Presentation*. This key guiding document addresses priority issues and maps out 30 specific actions to:

– build a strong foundation for professional heritage presentation delivery;

– ensure that visitors have access to top-quality interpretation opportunities;

– make national parks of Canada and national historic sites of Canada synonymous with education and enjoyment for all Canadians;

– guide investment decisions so that heritage presentation receives the funding necessary to achieve strategic objectives; and

– ensure that more Canadian and international audiences have access to educational opportunities.

PARKS CANADA STRATEGIC DIRECTION FOR RENEWAL OF INTERPRETATION AND ENHANCEMENT OF OUTREACH EDUCATION

– To make sure more Canadians and visitors learn about Canada's heritage and understand, appreciate and enjoy the system of national parks,national historic sites and national marine conservation areas of Canada,and especially their values and benefits.

– To offer visitors top-quality interpretation experiences at these heritage places.

– To offer access for outreach target audiences,particularly residents in key cities and youth,to top-quality learning experiences about national parks,national historic sites and national marine conservation areas of Canada.

Heritage Tourism

Heritage tourism is a growing industry. In Canada, heritage experiences are a primary catalyst of domestic and international leisure travel: some 75 percent of tourism attractions are natural and cultural heritage places and events. The Canadian Tourism Commission predicts that Canada will become the premier four-season destination for connecting with nature and for experiencing diverse cultures and communities.

Heritage tourism must be sustainable to be successful. For Parks Canada, sustainability

means access to the heritage places in its care that does not diminish their ecological and commemorative integrity, their raison d'être and the character that gives them value. It is a delicate balance, achieved through the concerted effort and assistance of visitors, Canadians in general, and key stakeholders such as the tourism industry and conservation interest groups.

SUSTAINABLE HERITAGE TOURISM MEANS THAT:

the nation's heritage is respected and appreciated by domestic and international travellers; visits to heritage places contribute to the social and economic well-being of the nation and its constituents without detriment to the heritage resources; and the integrity of the heritage resources is never jeopardized.

* * *

VISITOR USE AND ECOSYSTEM INTEGRITY

Continued research is essential for making wise visitor use decisions and ensuring long-term ecosystem health. Passively managed visitor use and access in the national parks and the marine conservation areas of Canada,together with unchecked expansion of facilities to meet expanding visitor demands,will result in serious habitat disturbances, increased potential for human-wildlife conflicts and overwhelming pressure on ecosystems.

Challenges for Parks Canada,in combination with the tourism industry, in developing an effective visitor use strategy, include:

– determining which combination of approaches will address the needs of visitors as well as the national parks,national historic sites and national marine conservation areas of Canada in a mutually supportive way; and

– counterbalancing the view that visitor use management is a limit to freedom.

FIRST NATION INTERPRETATION AT PUKASKWA NATIONAL PARK

Recognizing the important role Aboriginal people can play in presenting Canada's natural ecosystems,Pukaskwa National Park offers hiking,fishing and canoeing as well as back-country ecotours and nature appreciation tours led by experienced First Nations interpreters.

Learning Travel

Learning travel embodies the fundamentals of sustainable tourism. Over the past few years, Parks Canada has commissioned a number of investigations on learning travel. The results are being used to develop Parks Canada's Learning Travel Program as a vehicle that will enable individual national parks, national historic sites and national marine conservation areas of Canada to build on existing interpretive programs and heritage presentation initiatives, and to offer authentic, experiential learning opportunities that meet the heritage learning interests of visitors.

LIVING HISTORY AT LOWER FORT GARRY

This fort,established in 1830,is the oldest intact stone Hudson's Bay Company fur trading post.Located 30 kilometres north of Winnipeg,it features period-costumed interpreters who re-enact day-to-day life at the fort in the early days. Programs like the Foss Pelly Trail and events such as the Red River Rendezvous engage visitors directly and enable them to experience life in the Red River Settlement.

Visitor Preparedness

Parks Canada has, over the past years, engaged in a communications campaign to ask Canadians to take greater responsibility for the success and safety of their visits to national parks and national historic sites of Canada. In light of the rising popularity of adventure travel and outdoor pursuits, together with the increasing focus on the maintenance of ecological and commemorative integrity, Parks Canada is encouraging people to plan their visits carefully and with respect for the environment, and to recognize the risks involved in outdoor recreation and their chosen activities.

SMARTRISK

This organization was founded by Dr. Robert Conn in 1992 to address the issue of injuries and injury-related deaths among Canadians — the leading cause of death for people between the ages of one and 20. Parks Canada was instrumental in the development of an outdoor recreation component of the program as well as a French version of their youth-oriented, award-winning travelling injury prevention show, "Heroes."

Collaborative Action

Parks Canada recognizes that it cannot protect or conserve all the areas identified as important representatives of Canada's historic, natural and marine environments on its own. Parks Canada also realizes that it cannot reach all Canadians all by itself, and its three main target markets in particular, if it is to build awareness, increase knowledge and understanding, and encourage support and action on behalf of the national parks, national historic sites and national marine conservation areas of Canada.

The solution is to be found in collaborative action. Accordingly, Parks Canada has developed and reinforced strategic alliances with key representatives of various related sectors over the past few years.

The Tourism Industry

Parks Canada has taken strategic action to develop a mutually supportive relationship with the tourism industry. Its approach has been twofold: it has sought to become an active member of the tourism industry and it has collaborated with the industry in developing appropriate promotional messages and communication tools.

Parks Canada is now a member of three Canadian Tourism Commission executive committees: the Domestic Marketing Committee, the United States Leisure Marketing Committee and the Research Committee. It is also a director on Canada's Aboriginal Tourism Board and North America's National Tour Association, as well a member of the Tourism Industry Association of Canada.

Through these committees, Parks Canada is able to share information with industry leaders on the challenges and requirements of sustainable heritage tourism. Opportunities to raise industry awareness and support for heritage conservation arise. In addition, there are opportunities to influence demand for services in keeping with heritage conservation and service capacities, as well as the messages conveyed by the travel trade, travel media and destination marketing organizations promoting visitation to the national parks, national historic sites and national marine conservation areas of Canada.

Collaboration with the Canadian Tourism Commission is also changing the way national parks and national historic sites of Canada are presented to various audiences through television, newspaper and periodical advertising and editorial coverage, and through fulfilment travel publications. The messages, developed with Parks Canada input, emphasize the integrity and authenticity of the heritage experiences, as well as the challenges faced by the heritage resources.

The Education Sector

Strategic alliances built with various educational groups and agencies over the past few years have resulted in rewarding opportunities to raise awareness and foster understanding of Canada's system of heritage places with youth — a key Parks Canada audience.

Fort Langley Video Conferencing

In June 1999, five classes of grade 4 and 5 students from several British Columbia communities took virtual visits to the Fort Langley National Historic Site of Canada. Cosponsored with the British Columbia Ministry of Education, these virtual field trips used live video conferencing to take the students on a tour of the fort while interacting with Parks Canada interpreters without ever leaving their home towns.

Explore Canada/Explorer le Canada CD-ROM

Produced in 1997-98 by the non-profit Television Language Training Incorporated and released in 1998, this CD-ROM is part of a multi-departmental literacy project aimed at youth and adults who are learning French or English as a second language. It teaches users about the natural and cultural heritage of the national parks and the national historic sites of Canada as they learn their new language. Of the 2,500 CDs sold to date, the Ontario Language Initiatives for Newcomers Program has purchased 2,000, which have reached approximately 75,000 students through language classes. Several other provinces have shown interest in licensing the product.

Edukits

A joint venture between Parks Canada, the province of British Columbia, and a number of different agencies, the *Backyard Biodiversity Edu-kit* (1999) is aimed at youth in urban centres. This tool, distributed to each school board in British Columbia, is intended to help youth understand the local natural heritage and its relationship with ecosystems bordering national parks of Canada.

A second edukit was developed in partnership with the Canadian Academy of Travel and Tourism. It will provide high school students in over 12 schools across the nation with information to understand the national parks and the national historic sites of Canada, and will provide them with valuable information for future careers in the tourism industry.

Internet

Parks Canada's national website features two youth-oriented projects — *Images of Parks Canada* and *Commemorating Canada's History* — carried out under the SchoolNet Digital Collections Program funded by Industry Canada. Both projects offer a classroom activities section with accompanying learning outcomes and a teacher's guide to help teachers and young Canadians explore their heritage. In 1998, the two sites recorded about 16,500 visits. Both sites have been updated recently.

The *Parks Canada Educational Resources* section of the website is currently under development. The first unit will assist teachers in planning educational visits to the national parks and the national historic sites of Canada. Future plans include on-line learning links and the addition of learning products and teacher-student materials.

Contributions to School Curriculum

As of September 1999, the Ontario grade 9 core geography curriculum has contained Parks Canada material on the natural regions of Canada, with the national parks of Canada serving as the central reference. Students and educators explore the network of national parks of Canada by means of Geographic Information System data and visual materials that present the natural environment and heritage of Canada's national parks in detail. This initiative has the potential to reach hundreds of thousands of Ontario students annually.

1998 "Take-a-hike" participants

Stakeholders

Stakeholders are groups of people who share Parks Canada's values and support its mandate. They have goals similar to those of Parks Canada and wish to influence its work accordingly. Stakeholders help Parks Canada achieve its mandate by providing an outside perspective, performing important services and helping raise awareness, which leads to understanding and growing involvement with Parks Canada.

Many national, provincial, regional and local organizations, as well as interested citizens and volunteers, contribute to the protection and presentation of the national parks, national historic sites and national marine conservation areas of Canada.

Canadian Parks Partnership

Established in 1986, the Canadian Parks Partnership is a national nonprofit umbrella organization representing 65 cooperating associations across the country affiliated with federal, provincial and municipal government agencies. Cooperating associations are registered nonprofit groups established under agreement with Parks Canada to undertake programs and activities in support of the agency's mandate. These volunteer "friends" reflect public interest and undertake projects and activities to enhance the effectiveness of Parks Canada. In 1997, cooperating associations numbered 42. By 1999, the number had grown to 51 associations in every province at the national parks and the national historic sites of Canada.

The Canadian Parks Partnership provides services, programs, training and support to its member organizations and their partner parks, sites and canals. The Canadian Parks Partnership works with Parks Canada to deliver a variety of national programs, including the annual event of "Take-a-hike." This three-way partnership between government, business and the non-profit sector was created to provide Canadian and international visitors with an opportunity to learn about and support Canada's natural and cultural heritage through interpretive hikes, walks and similar events. Held each year on Canada's Parks Day, "Take-a-hike" is coordinated nationally by the Canadian Parks Partnership with support from the Federal-Provincial Parks Council, Parks Canada and a number of Canadian corporations. In 1999, 230 "Take-a-hike" events attracted a total of 37,000 participants.

National Volunteer Program

Volunteering is a long-standing tradition within Parks Canada, which has operated a formal volunteer program for the past 20 years. In 1998-99, a total of 5,225 volunteers worked on 304 projects, generously donating 160,500 hours of their time. Volunteers span a variety of ages and experiences, including active seniors, students seeking work experience, professionals serving between careers, and youth looking for a worthwhile pursuit during summer vacation. They work on tasks that vary from maintaining trails and cleaning beaches to managing artifact collections, holding special events, and more — all important contributions to Parks Canada's mandate.

In 1999, Parks Canada conducted an administrative review of its volunteer program, including the planning, recruiting, orientation, supervision and recognition components. The results of that review, followed by a second review, will be used to chart the future of Parks Canada's volunteer program, which will be reported in the next Status of Protected Heritage Areas Report.

APPENDICES

Appendix 1.

Status of Management Plans and Ecological Integrity Statements for National Parks and National Marine Conservation Areas of Canada as of March 31,1999

Park / National Marine / Site / Conservation Area	Ecological Integrity Statement Completion Date	Next Management Plan Review Date	Last Approval Date
Aulavik	Approved in 1997 (in draft Park Management Plan)	Plan:2000 - 2001	Interim Management Guidelines – 1995
Auyuittuq	1997	Plan : To be confirmed.	Interim Management Guidelines – 1982
Banff	Approved in 1997 (in Park Management Plan)	Proposed amendments Plan :2001-02	1997
Banff Townsite – Community		Plan : Pending Bill C-27	
Banff – Lake Louise		Pending Bill C-27	
(Yoho/Kootenay/ Lake Louise Field Unit)		Plan :1999-2000	
Bruce Peninsula	1998	Plan :2002-2003	1998
Cape Breton Highlands	Preparation to begin in 2000 - 2001	Plan :2001-2002	1995
Elk Island	1999	Plan :2001-2002	1996
Fathom Five Marine Park	N/A	Plan :2002-2003	1998
Forillon	1998	Plan :2001-2002	1996
Fundy	Approved in 1997 (in Ecosystem Conservation Plan)	Plan :1999-2000	1992
Georgian Bay Islands	1999	Plan :2002-2003	1998
Glacier	1998	Plan :2001-2002	1995
Grasslands	Included in Draft Park Management Plan	Plan :Winter 2000	Interim Management Guidelines – 1991
Gros Morne	1999	Plan:Winter 2000	1984
Gwaii Haanas National Park Reserve	1998	Completed	Interim Management Guidelines – 1992
Ivvavik	Issue under consideration	Plan :2000-2001	1994
Jasper	1999	Plan :	1988
Jasper Townsite – Community		Pending Bill C-27	
Kejimkujik	1998	Plan :2000-2001	1996
Kluane National Park and Reserve	1999	Plan :2000-2001	1990
Kootenay	1999	Plan :1999-2000	1988
Kouchibouguac	1998	Plan :2000-2001	1994
La Mauricie	1999	Plan :2000-2001	1992
Mingan Archipelago National Park Reserve	End of March 2000	Plan :2000-2001	1991
Nahanni National Park Reserve	Issue under consideration	Plan :1999-2000	1994
Pacific Rim National Park Reserve	1998	Interim Plan :2000-2001	Interim Management Guidelines – 1994 Approved by "Regional Director" pending treaty negotiations
Point Pelee	1997	Plan :2001-2002	1996
Prince Albert	Approved in 1996 (under review, February 2000)	Plan :2000-2001	1995
Prince Albert – Waskesiu Community	Pending Bill C-27	Plan :1999-2000	
Prince Edward Island	Preparation to begin in 2000	Plan :2003-2004	1998
Pukaskwa	Approved in 1996 (in Ecosystem Conservation Plan)	Plan :2001-2002	1995
Quttinirpaaq (Ellesmere)		Plan : To be confirmed.	Interim Management Guidelines – 1988
Revelstoke	1998	Plan :2002-2003	1995
Riding Mountain	Preparation to begin in 2000	Plan :2002-2003	1996
Riding Mountain – Wasagaming Community		Pending Bill C-27 Plan :1999-2000	

Saguenay - St.Lawrence Marine Park	N/A	Plan :2004-2005 (every 7 years)	Approved by Ministers: 1998 – Federal Hon.Sheila Copps and Hon.Andy Mitchell – Provincial Hon. Paul Bégin and Hon.Jacques Brassard in June 1998
Sirmilik		Plan : To be confirmed.	
St. Lawrence Islands	1999	Plan : 2002-2003	1998
Terra Nova	Preparation to begin in 2000	Plan :2002-2003	1997
Tuktut Nogait	Issue under consideration	Plan :2002-2003	
Vuntut	1999	Interim plan :2000-2001	
Wapusk	Preparation to begin in 2000	Plan :2000 -2001	
Waterton Lakes	Approved in 1998 (in Ecosystem Conservation Plan)	Plan : 1999-2000	1994
Waterton Lakes – Waterton Community		Pending Bill C-27	
Wood Buffalo	2000	Plan :2001-2002	1984
Yoho	1999	Plan :1999-2000	1988
Yoho – Field Community		Pending Bill C-27 Plan : 1999-2000	

Appendix 2.

Freshwater and Terrestrial COSEWIC Endangered and Threatened Species Recorded in the National Parks of Canada in 1999*

ENDANGERED

Acadian Flycatcher	PELE GBIS
Burrowing Owl	GRAS BANF WATE
Eastern Prickly Pear Cactus	PELE
Eskimo Curlew	PEIS
Henslow's Sparrow	BRUC PELE SLIS
King Rail	PELE
Kirtland's Warbler	BRUC PELE
Loggerhead Shrike	BRUC GBIS PELE SLIS FUND
Mountain Plover	GRAS
Northern Bobwhite	PELE
Northern Cricket Frog	PELE
Piping Plover	KOUC GROS KEJI BRUC GBIS PELE SLIS PEIS GRAS
Pitcher's Thistle	PUKA
Prothonotary Warbler	GBIS PELE GROS
Red Mulberry	PELE
Sage Grouse	GRAS
Sage Thrasher	REVE PELE GRAS
Slender Bush Clover	PELE
Slender Mouse-ear-cress	YOHO GRAS
Swift Fox	GRAS
Whooping Crane	WOOD PALB VUNT SIRM WATE

THREATENED

American Water-willow	PELE
Black Rat Snake	SLIS
Blackfin Cisco	FIVE PUKA
Blue Ash	PELE
Channel Darter	SLIS
Deerberry	SLIS
Eastern Sand Darter	PELE
Fowler's Toad	PELE
Fox Snake	GBIS PELE
Hooded Warbler	PELE FUND KOUC
Kentucky Coffee Tree	PELE
Loggerhead Shrike	ELKI RIDM GRAS WATE
Marbled Murrelet	PRIM GWAA
Massasauga Rattlesnake	BRUC GBIS PELE
Queen Snake	BRUC PELE
Shortjaw Cisco	WOOD PUKA
Shortnose Cisco	SLIS
Spiny Softshell	PELE
Sprague's Pipit	GRAS RIDM WATE PALB
Water-pennywort	KEJI

* Committee on the Status of Endangered Wildlife in Canada

Key to National Parks of Canada Name Codes

Aulavik	AULA	Grasslands	GRAS	Mingan Archipelago	MING	Riding Mount	RIDM
Auyuittuq	AUYU	Gros Morne	GROS	Nahanni	NAHA	Sirmilik	SIRM
Banff	BANF	Gwaii Haanas	GWAA	Terra Nova	NOVA	St.Lawrence Islands	SLIS
Bruce Peninsula	BRUC	Ivvavik	IVVA	Prince Albert	PALB	Tuktut Nogait	TUKU
Cape Breton	CBHI	Jasper	JASP	Prince Edward	PEIS	Vuntut	VUNT
Elk Island	ELKI	Kejimkujik	KEJI	Point Pelee	PELE	Wapusk	WAPU
Forillon	FORI	Kluane	KLUA	Pacific Rim	PRIM	Waterton Lakes	WATE
Fundy	FUND	Kootenay	KOOT	Pukaskwa	PUKA	Wood Buffalo	WOOD
Georgian Bay	GBIS	Kouchibouguac	KOUC	Quttinirpaaq	QUTT	Yoho	YOHO
Glacier	GLAC	La Mauricie	MAUR	Mount Revelstoke	REVE		

Appendix 3.

Site Responses to the Top Five Stressors in the National Parks of Canada

Sites marked with an asterisk (*) are currently updating their evaluation of stresses in the park.Under each stressor, the status is marked with "-",declining; "o"stable; "+",increasing; or "?",unknown.The numbers listed for each site and stressor indicate which of the seven actions managers are taking on that stessor. These are:1,nothing; 2,background research; 3,data collection to define stressor; 4,monitoring stressor; 5,project to study stressor; 6,mitigation measures implemented; 7,monitoring and mitigation measures implemented.

	STRESSOR NAME AND STATUS				
SITE NAME	**1**	**2**	**3**	**4**	**5**
Aulavik*	Climatic Change +;3,4	Pesticides o;3,4	Solid Waste -; 3,4,6,7	Park Management Practices o; 4,6,7	Human Disturbance o; 4,6,7
Auyuittuq NPR	Climate Change ?; 3	Human Disturbance +; 4,6			
Banff NP	Human Disturbance +; 2,3,4,5,6,7	Park Management Practices o; 2,3,4,5,6,7	Urbanization +; 2,3,4,5,6,7	Vehicle Animal Collisions o; 2,3,4,5,6,7	Dams o; 2,3,4,5
Bruce Peninsula NP	Urbanization +; 2,3,4	Forestry +; 2,3,4	Human Disturbance +; 2,3,4,5,6	Visitor Tourism Facilities o; 2,4	Park Infrastructure o; 2,4,6
Cape Breton NP	Urbanization o; 1	Exotic Vegetation o; 2,4,6	Park Management Practices o; 1	Visitor Tourism Facilities o; 2,3,4,6	Commercial Fishery o; 2,3,4,6
Elk Island NP	Park Management Practices o; 2,3,4,5,6,7	Urbanization -; 2,6	Forestry -; 2,3,4,5,6,7	Agriculture o; 1	Acid Precipitation o; 2,3,4,5
Ellesmere NP	Climate Change ?; 3	Human Disturbance +; 4,6	Pesticides ?; 3		
Forillion NP	Urbanization +; 2,3,5,6	Visitor Tourism Facilities o; 2	Forestry +; 2,3,5,6	Park Management Practices o; 2	Utility Corridors o; 2
Fundy NP	Forestry +; 3,4,5	Urbanization +; 1	Visitor And Tourism Facilities -; 3,5,6	Utility Corridors +; 6	Sport Fishing +; 3,4,6
Georgian Bay Islands NP	Urbanization +; 1	Human Disturbance +; 2	Utility Corridors +; 1	Acid Precipitation +; 4	Visitor Tourism Facilities +; 4
Grasslands NP	Exotic Vegetation +; 2,3,4,5	Agriculture o; 3,6,7	Park Management Practices o; 2,3,5	Pesticides o?; 1	Climate Change o?; 5
Gros Morne NP	Forestry +; 2,3,4,5	Urbanization o; 2,3,4,5	Visitor and tourism facilities +; 2,3,4,5	Exotic mammals +; 2,3,4,5	Exotic vegetation o; 2,3,4,5
Gwaii Haanas NP	Exotic Mammals +; 2,3,4,5,6,7	Exotic Vegetation +; 2,3,5	Commercial Fishing +; 2,3,5	Forestry o; 2,3,5,6,7	Visitor Tourism Facilities o; 2,3,4,5,6,7
Ivvavik NP*	Climatic Change +; 3,4	Solid Waste -; 3,4,6,7	Poaching o; 2,3,4,6,7	Park Management Practices o; 4,6,7	Human Disturbance o; 4,6,7
Jasper NP	Human Disturbance +; 2,3	Park Management Practices +; 2,3,4,5,6,7	Urbanization +; 2,3	Utility Corridors +; 3,5,6	Visitor Tourism Facilities +; 3
Kejimkujik NP	Acid Precipitation o; 2,3,4,5,6,7	Urbanisation +; 2,3,4,5,6,7	Visitor Tourism Facilities +; 2,3,4,5,6	Sport Fishing o; 2,3,4,5,6,7	Exotic Vegetation o; 2,3,4,5,6,7
Kluane NP	Urbanisation +; 2,3,4,6	Human Disturbance +; 2,3,4,6,7	Forestry +; 2,3,4,5,6	Mining o; 2,3,4,6	Sport Fishing +; 2,3,4,5,6
Kootenay and Yoho NPs	Human Disturbance +; 2,3,4,5,6,7	Vehicle Animal Collisions +; 2,3,4,5,6,7	Utility Corridors +; 2,3,4,5,6,7	Park Management Practices o; 2,3,4,5,6,7	Exotic Vegetation o; 2,3,5,6,7
Kouchibouguac NP	Commercial Fishing -; 2,3,4,5,6,7	Forestry o; 2,3,4,5	Mining o; 2,4,5,6,7	Park Infrastructure +; 2,3,4,5,6,7	Urbanization +; 2,3,4,5
La Mauricie NP	Urbanization +; 2	Acid Precipitation o; 3,4	Exotic Fish +; 2,3,4,5	Sport Fishing o; 2,3,4,5,6,7	Park Infrastructure +; 2,3,4,5,6,7
Mingan Archipelago NP	Urbanization +; 2,3,4	Commercial Fishing +; 3	Human Disturbance +; 2,3,4,6	Poaching o; 3,4,6	Climate Change o; 2,3
Nahanni NP*	Mining o; 3,4	Park Management Practices -; 6			
Pacific Rim NP	Human Disturbance +; 3,4,6	Forestry +; 2	Urbanization +; 2	Commercial Fishing +; 2,3,4,6	Sport Fishing +; 2,3,4,5,6,7
Prince Edward Island NP	Visitor Tourism Facilities +; 2	Human Disturbance +; 4,6,7	Agriculture +; 2,3,4,6	Park Management Practices o; 3,4	Park Infrastructure +; 2
Point Pelee NP	Urbanization o; 2,3,5	Human Disturbance +; 3	Pesticides o; 2,3,5	Sewage o; 2,3,6,7	Exotic Vegetation o; 3,5,6

	STRESSOR NAME AND STATUS				
SITE NAME	**1**	**2**	**3**	**4**	**5**
Prince Albert NP	Human Disturbance +; 4	Dams -; 4,6,7	Visitor Tourism Facilities o; 1	Park Management Practices o; 4,6,7	Exotic Vegetation +; 2,5
Pukaskwa NP	Acidic Precipitation +; 2,4,5	Forestry +; 2,3,4,5,6,7	Park Management Practices +; 2,3,4,5,6,7	Mining o; 4,6	Utility Corridors o; 4,6,7
Mount Revelstoke and Glacier NPs	Forestry +; 2,3,4,5,6	Dams o; 2,3,4,6,7	Utility Corridors +; 2,3,5	Human Disturbance +; 3	Climate Change +; 2,3,4,5
Riding Mountain NP	Human Disturbance o; 2,3	Park Infrastructure o; 2,3	Agriculture o; 2,3,5	Utility Corridors o; 2,3,5	Exotic Vegetation o; 2,3,4,5,6,7
St.Lawrence Islands NP	Human Disturbance +; 2,3,4,5	Exotic Invertebrates +; 2,3,4,5	Urbanization +; 2,3,4,5	Exotic Vegetation +; 2,3,4,5	Sport Fishing +; 2,3,4,5
Terra Nova NP	Human Disturbance +; 2,3	Exotic Mammals +; 2,3,4,5	Park Management Practices +; 2,3,4,5,6	Forestry +; 2,3,4	Utility Corridors o; 2,3
Tuktut Nogait*	Climatic Change +; 3,4	Pesticides o; 3,4,5	Solid Waste -; 3,4,6,7	Mining +; 2,4	Park Management Practices o;4,6,7
Vuntut NP*	None Identified	None Identified	None Identified	None Identified	None Identified
Wapusk NP	Human Disturbance +; 2,3,4,5	Climate Change +; 1	Dams o; 1	Utility Corridors o; 1	Visitor Tourism Facilities +; 2
Waterton Lakes NP	Urbanization +; 2,3,4,5,6,7	Park Management Practices +; 2,3,4,5,6	Human disturbance o; 2,3,4,6,7	Exotic Fish o; 2,3,4,5	Climate Change +; 1
Wood Buffalo NP*	Dams -; 4	Visitor Tourism Facilities ?; 1	Forestry ?; 2	Climate Change ?; 2	Exotic Vegetation ?; 2
Number Increasing (+), Stable (o), Decreasing (-) or Unknown (?)	**25 6 2 2**	**19 11 4 1**	**18 9 4 2**	**10 21 0 2**	**13 18 0 2**
Percentage Increasing (+), Stable (o), Decreasing (-) or Unknown (?)	**71 17 6 6**	**54 31 11 3**	**54 27 12 6**	**30 64 0 6**	**39 54 0 6**

Appendix 4.

Status of Management Plans and Commemorative Integrity Statements for National Historic Sites of Canada Administered by Parks Canada

NATIONAL HISTORIC SITE	COMMEMORATIVE INTEGRITY STATEMENT	MANAGEMENT PLAN STATUS	ACTIVE MANAGEMENT PLANNING
NEWFOUNDLAND (Total of 9)	**4 approved / 5 planned**	**4 approved**	**6 planned**
CAPE SPEAR	A 1999	A 1980	2001-2002 Planned
CASTLE HILL	1999-2000 Planned	2001-2002 Planned	
HAWTHORNE COTTAGE	2000-2001 Planned	2001-2002 Planned	
HOPEDALE MISSION	1999-2000 Planned		
L'ANSE AUX MEADOWS	A 1999		1999-2000 Planned
PORT AU CHOIX	1999-2000 Planned	A 1990	2001-2002 Planned
RED BAY	A 1997		
RYAN PREMISES	A 1997	A 1995	
SIGNAL HILL	1999-2000 Planned	A 1986	2001-2002 Planned
NEW BRUNSWICK (Total of 7)	**3 approved / 2 draft**	**2 approved**	**2 planned**
BEAUBEARS ISLAND	1999-2000 Draft		
CARLETON MARTELLO TOWER	1999-2000 Draft		2000-2001 Planned
FORT BEAUSÉJOUR	A 1997	A 1996	
FORT GASPAREAUX	A 1997	A 1996	
LA COUPE DRY DOCK			
MONUMENT LEFEBVRE			
ST. ANDREWS BLOCKHOUSE	A 1999		2000-2001 Planned
NOVA SCOTIA (Total of 16)	**9 approved / 2 drafts / 3 planned**	**8 approved / 4 completed / 1 draft**	**9 planned**
ALEXANDER GRAHAM BELL	1999-2000 Planned	A 1992	2001-2002 Planned
FORT ANNE	A 1998	C 1998	
FORT EDWARD	A 1998	C 1998	
FORT MCNAB	A 1998	A 1993	
FORTRESS OF LOUISBOURG	A 1997	D 1999	
GEORGES ISLAND	A 1998	A 1993	2001-2002 Planned
GRAND-PRÉ	A 1997	C 1998	
GRASSY ISLAND	1999-2000 Planned	A 1983	2000-2001 Planned
HALIFAX CITADEL	A 1998	A 1994	2001-2002 Planned
KEJIMKUJIK	1999-2000 Planned		2001-2002 Planned
MARCONI	1999-2000 Planned		2001-2002 Planned
PORT-ROYAL	A 1997	C 1998	
PRINCE OF WALES TOWER	1999-2000 Draft	A 1993	2000-2001 Planned
SCOTS FORT/THE SCOTCH FORT			
ST PETERS CANAL	1999-2000 Draft		2000-2001 Planned
YORK REDOUBT	A 1997	A 1993	2000-2001 Planned
PRINCE EDWARD ISLAND (Total of 4)	**1 approved**	**3 draft**	**1 draft**
ARDGOWAN	1999-2000 Draft		
DALVAY-BY-THE-SEA	1999-2000 Draft		
PROVINCE HOUSE	1999-2000 Draft		
FORT AMHERST-PORT-LA-JOYE	A 1997	D 1999	
QUEBEC (Total of 27)	**10 approved / 17 planned**	**17 approved / 6 completed**	**22 planned**
ARTILLERY PARK	2000-2001 Planned		2000-2001 Planned
BATTLE OF THE CHATEAUGUAY	A 1999		2000-2001 Planned
BATTLE OF THE RESTIGOUCHE	2000-2001 Planned	A 1984	2001-2002 Planned
CARILLON BARRACKS	2000-2001 Planned		2000-2001 Planned
CARILLON CANAL	A 1998	C 1999	1999-2000 Planned
CARTIER-BRÉBEUF	A 1997	A 1993	2001-2002 Planned
CHAMBLY CANAL	2000-2001 Planned	A 1990	2000-2001 Planned
COTEAU-DU-LAC	2000-2001 Planned	A 1986	
FORGES DU ST-MAURICE	2001-2002 Planned	A1981	2001-2002 Planned
FORT CHAMBLY	2001-2002 Planned	A 1980	2000-2001 Planned
FORT LENNOX	2001-2002 Planned	A 1993	
FORT NO. 1 AT POINT DE LÉVY	2000-2001 Planned	A 1988	2000-2001 Planned
FORT TÉMISCAMINGUE	A 1997	A 1990	2003-2004 Planned

NATIONAL HISTORIC SITE	COMMEMORATIVE INTEGRITY STATEMENT	MANAGEMENT PLAN STATUS	ACTIVE MANAGEMENT PLANNING
FORTIFICATIONS OF QUÉBEC	2000-2001 Planned	A 1988	2000-2001 Planned
GRANDE-GRAVE	2000-2001 Planned		2001-2002 Planned
GROSSE-ÎLE AND THE IRISH MEMORIAL	A 1998	C 2000	
LACHINE CANAL	A 1997	C 1998 / A 1979	
LOUIS S.ST. LAURENT	1999-2000 Planned	A 1981	2000-2001 Planned
LOUIS JOSEPH PAPINEAU	2001-2002 Planned		2001-2002 Planned
MAILLOU HOUSE -OLD COMMISARIAT BUILDING	2000-2001 Planned		2000-2001 Planned
MANOIR PAPINEAU	A 1997	C 1999	
POINTE-AU-PÈRE LIGHTHOUSE	2001-2002 Planned		2003-2004
SAINT-OURS CANAL	A 1998	C 1999	
SAINTE-ANNE-DE-BELLEVUE CANAL	A 1998	C 1999	
SIR GEORGE-ÉTIENNE CARTIER	2001-2002 Planned	A 1985	2003-2004 Planned
SIR WILFRID LAURIER	2001-2002 Planned		2003-2004 Planned
THE FUR TRADE AT LACHINE	A 1999		2001-2002 Planned
ONTARIO (Total of 32)	**17 approved / 4 drafts / 6 planned**	**8 approved / 1 completed / 12 drafts**	**10 planned**
BATTLE OF THE WINDMILL	A 1998	C 1999	A 1988
BELLEVUE HOUSE	1998-1999 Draft		2000-2001 Planned
BETHUNE MEMORIAL HOUSE	A 1998	C 1999	
BOIS BLANC ISLAND LIGHTHOUSE	1999-2000 Planned	A 1983	
BUTLER'S BARRACKS	A 1998	D 1999 / A 1983	
FORT HENRY	A 1999		2000-2001 Planned
FORT GEORGE	A 1998	D 1999	
FORT MALDEN	A 1998	D 1999 / A 1983	
FORT MISSISSAUGA	A 1998	D 1999	
FORT ST. JOSEPH	1997-1998 Draft	D 1999 / A 1977	
FORT WELLINGTON	A 1998	D 1999 / A 1988	
GLENGARRY CAIRN	1999-2000 Planned		
INVERARDEN HOUSE	1999-2000 Planned		2000-2001 Planned
KINGSTON FORTIFICATIONS	A 1999		2001-2002 Planned
MERRICKVILLE BLOCK HOUSE			
LAURIER HOUSE	A 1998		1999-2000 Planned
MNJIKANING FISH WEIRS	1999-2000 Planned		2001-2002 Planned
NAVY ISLAND	A 1998	D 1999	
PETERBOROUGH LIFTLOCK			
POINT CLARK LIGHTHOUSE	2000-2001 Planned		
POINT MISSISSAUGA LIGHTHOUSE			
QUEENSTON HEIGHTS	A 1998	C 1999	
RIDEAU CANAL	1998-1999 Draft	A 1995	2001-2002 Planned
SAINT-LOUIS MISSION			
SAULT STE.MARIE CANAL	A 1999	D 1999	
SOUTHWOLD EARTHWORKS	1999-2000 Planned	A 1982	1999-2000 Planned
TRENT-SEVERN WATERWAY	1997-1998 Draft	C 1997	
WOODSIDE	A 1998	D 1999	
MANITOBA (Total 8)	**4 approved / 3 draft / 1 planned**	**4 approved / 1 completed**	**5 planned**
LINEAR MOUNDS	2000-2001 Planned		
LOWER FORT GARRY	1999-2000 Draft	A 1994	2001-2002 Planned
PRINCE OF WALES FORT	A 1996	C 1997	
RIDING MOUNTAIN EAST GATE REGISTRATION	A 1999		
RIEL HOUSE	A 1999		1999-2000 Planned
ST. ANDREW'S RECTORY	1999-2000 Draft	A 1983	1999-2000 Planned
THE FORKS	1999-2000 Draft	A 1986	2000-2001 Planned
YORK FACTORY	A 1998	A 1988	2001-2002 Planned
SASKATCHEWAN (Total 10)	**2 approved / 7 drafts**	**4 approved / 1 completed / 1 draft**	**7 planned**
BATOCHE	A 1997	C 1997 / A 1981	
BATTLE OF FISH CREEK	1999-2000 Draft		2001-2002 Planned

NATIONAL HISTORIC SITE	COMMEMORATIVE INTEGRITY STATEMENT	MANAGEMENT PLAN STATUS	ACTIVE MANAGEMENT PLANNING
FROG LAKE MASACRE			
FORT BATTLEFORD	A 1998	D 1999 / A 1988	
FORT ESPÉRANCE	1999-2000 Draft		2000-2001 Planned
FORT LIVINGSTONE	1999-2000 Draft		2000-2001 Planned
FORT PELLY	1999-2000 Draft		1999-2000 Planned
FORT WALSH	1999-2000 Draft	A 1993	2001-2002 Planned
FRENCHMAN BUTTE	1999-2000 Draft		1999-2000 Planned
MOTHERWELL HOMESTEAD	1999-2000 Draft	A 1990	1999-2000 Planned
ALBERTA (total 14)	**4 approved / 1 draft / 9 planned**	**2 approved**	**2 planned**
ABBOT PASS REFUGE CABIN	1999-2000 Planned		
ATHABASKA PASS	2000-2001 Planned		
BANFF PARK MUSEUM	A 1999		
BAR U RANCH	A 1999	A 1995	2001-2002 Planned
CAVE AND BASIN	A 1999		
FIRST OIL WELL IN WESTERN CANADA	2000-2001 Planned		
HENRY HOUSE	2000-2001 Planned		
HOWSE PASS	1999-2000 Planned		
JASPER HOUSE	2000-2001 Planned		
JASPER PARK INFORMATION CENTRE	2000-2001 Planned		
ROCKY MOUNTAIN HOUSE	A 1998	A 1994	1999-2000 Planned
SKOKI SKI LODGE	1998-1999 Draft		
SULPHUR MOUNTAIN COSMIC RAY STATION	1999-2000 Planned		
YELLOWHEAD PASS	1999-2000 Planned		
BRITISH COLUMBIA (Total 12)	**7 approved / 1 draft / 4 planned**	**6 approved / 2 drafts**	**4 planned**
CHILKOOT TRAIL	A 1997	D 1999	A 1988
FISGARD LIGHTHOUSE	A 1996	A 1986	2000-2001 Planned
FORT LANGLEY	A 1995	A 1995	2001-2002 Planned
FORT RODD HILL	A 1996	A 1986	2001-2002 Planned
FORT ST. JAMES	A 1996	D 1999	
GULF OF GEORGIA CANNERY	A 1998	A 1993	1999-2000 Planned
KICKING HORSE PASS	1999-2000 Planned		
KITWANGA FORT	1999-00 Planned	A 1981	
NAN SKIDS/NINSTINTS	1999-2000 Planned		
RODGERS PASS	A 1998		
STANLEY PARK	1998-1999 Draft		
TWIN FALLS TEA HOUSE	1999-2000 Planned		
YUKON (Total 5)	**4 approved**	**2 approved / 5 drafts**	
DAWSON HISTORICAL COMPLEX	A 1997	D 1999 / A 1978	
DREDGE NO. 4	A 1999	D 1999	
GOLD ROOM AT BEAR CREEK		D 1999	
S.S.KENO	A 1997	D 1999	
S.S.KLONDIKE	A 1997	D 1999 / A 1988	

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