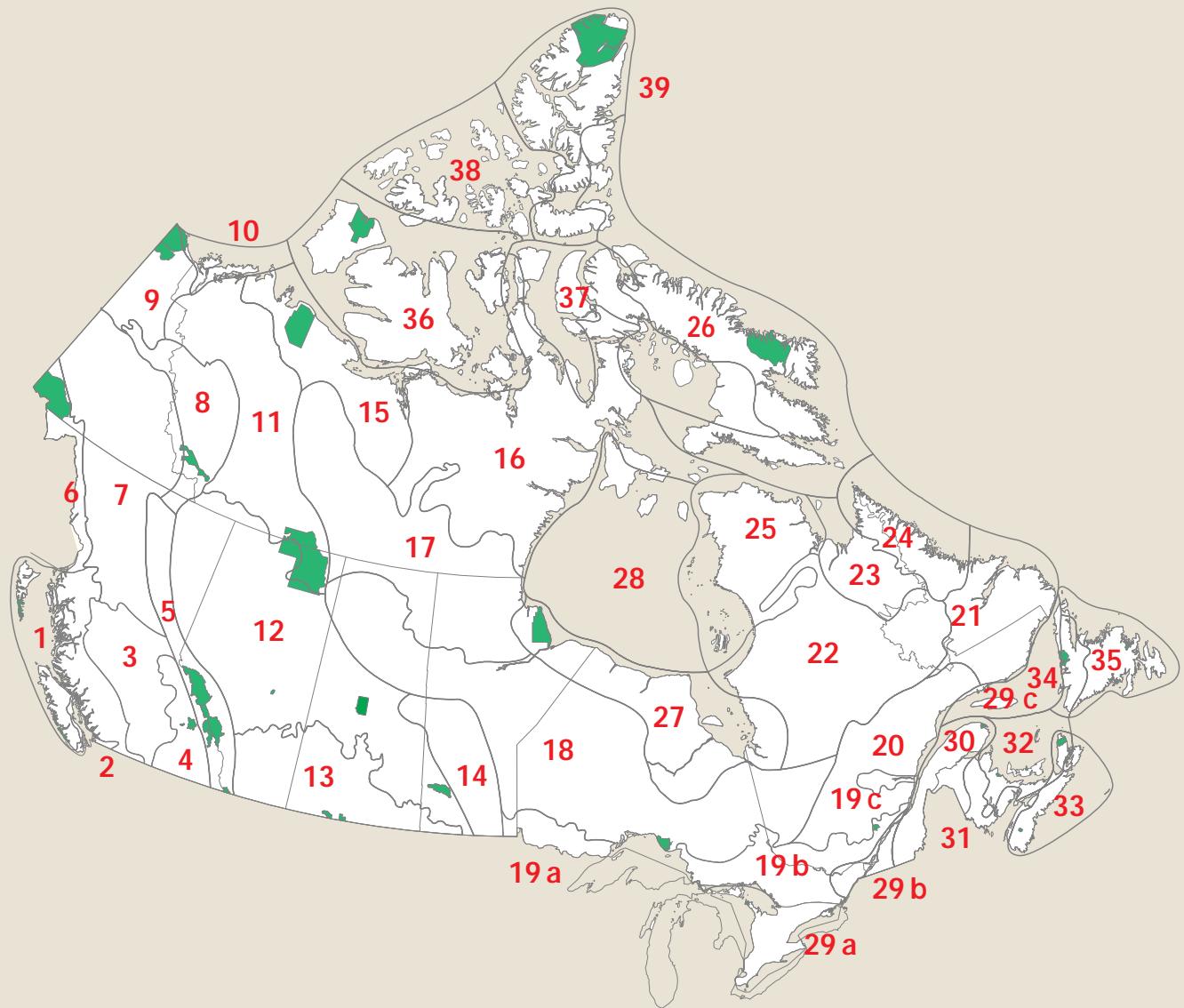


National Park System Plan



Introduction to
National Park System Plan

Status of Planning for
Natural Regions

Introduction

To protect for all time representative natural areas of Canadian significance in a system of national parks, to encourage public understanding, appreciation and enjoyment of this natural heritage so as to leave it unimpaired for future generations.

***Parks Canada Objective
for National Parks***



Fundy National Park

CANADA'S NATIONAL HERITAGE

As Canadians, we are increasingly concerned about the environment that will be inherited by our children. In a world of rapid change, our parks, historic sites and marine conservation areas are seen as models of environmental stewardship and as an important legacy to be preserved for future generations. They represent one of the most positive, tangible and enduring demonstrations of the federal government's commitment to the environment.

The federal government is committed to implement the concept of sustainable development. This concept holds that human economic development must be compatible with the long-term maintenance of natural ecosystems and life support processes. A strategy to implement sustainable development requires not only the careful management of those lands, waters and resources that are exploited to support our economy, but also the protection and presentation of our most important natural and cultural areas. Protected areas contribute directly to the conservation of biological diversity and, therefore, to Canada's national strategy for the conservation and sustainable use of biological diversity.

Our system of national parks and national historic sites is one of the nation's - indeed the world's - greatest treasures. It also represents a key resource for the tourism industry in Canada, attracting both domestic and foreign visitors. The federal government is committed to passing on this priceless legacy not only intact, but expanded and improved. Parks Canada is the federal agency, within the Department of Canadian Heritage, with responsibility for national parks, as well as national historic sites and national marine conservation areas.



Grasslands National Park

Introduction

OUR NATIONAL PARKS

National parks protect natural environments representative of Canada's natural heritage. These special places are gateways to nature, to adventure, to discovery, to solitude. They celebrate the beauty and infinite variety of our country. Protected and preserved for all Canadians and for the world, each is a sanctuary in which nature is allowed to evolve in its own way, as it has done since the dawn of time. Each provides a haven, not only for plants and animals, but also for the human spirit. A place to wander... to wonder...to discover yourself.

Canada's first national park was created over 100 years ago at Banff. Our goal is to establish a system of national parks that represents each of Canada's distinct natural regions. This system is just over 60% completed.



The purpose of this report is to familiarize the reader with the 39 terrestrial national park natural regions of Canada (Map 1), to identify regions presently represented by national parks, and to introduce those regions not yet represented by national parks. The overall status of completion of the national parks system is shown on Map 2. More detail is provided in the descriptions of the natural regions.

IT STARTED AT BANFF...

National parks are part of a grand vision to preserve examples of the diversity of our land and of the life that is an integral part of it. They are strictly protected areas where



Pacific Rim National Park

commercial resource extraction and sport hunting are not permitted. But these are not merely nature sanctuaries preserved and locked away; they are places where people of all ages are invited to experience the outdoors and to learn about the natural environment.

The vision began, albeit a much different vision then, in 1885 when the federal government reserved "from sale or settlement or squatting" 26 square kilometres around the hot mineral springs near what is now the town of Banff, Alberta. Two workers constructing the transcontinental railway in this area had discovered the hot springs flowing from a mountainside near the railway station. Various conflicting claims were brought to the attention of the Government of Canada. Rather than grant the privilege of developing the hot springs to private individuals, the government of Sir John A.



Banff National Park, 1887

Introduction



Point Pelee National Park

MacDonald decided instead to retain the hot springs and surrounding lands as a national treasure. The Order-in Council, signed two weeks after the driving of the famous last spike that marked the completion of the Canadian Pacific transcontinental railway, signalled the birth of Banff National Park (then known as Rocky Mountains National Park) and what was to become a system of national parks across Canada.

Two years later, in 1887, the Rocky Mountains Park Act officially set aside the Banff Hot Springs Reserve, enlarged to 405 square kilometres, as a “public park and pleasure ground for the benefit, advantage and enjoyment of the people of Canada.”

By 1911, five national parks in the Rocky and Selkirk mountains had been created. Meanwhile, in the east, other parks were being established, again on federal lands. St. Lawrence Islands National Park was created in 1904 with the reservation of nine islands. Point Pelee was established in 1918 and Georgian Bay Islands in 1929. From 1930 to 1970, attention turned to Atlantic Canada, where five national parks were established by agreement with the provinces for the transfer of those lands to the federal government.

Up to 1970, 20 national parks had been es-

tablished, but not according to any real system. They represented, rather, a collection of special places, created in some cases by heroic efforts, accidents of geography or political opportunism that had been set aside for a variety of purposes - to protect scenery for national and international tourist resorts, to provide regional recreation areas, to create sanctuaries for wildlife, to stimulate flagging economies in areas of chronic underemployment.... There was no vision or long-term goal for a system of national parks.

A SYSTEM PLAN FOR NATIONAL PARKS

This vision was provided by a national parks system plan devised in the early 1970s. Its fundamental principle was to protect a representative sample of each of Canada's landscapes. In order to guide the development of a finite system of national parks using this principle of “representativeness”, Canada was divided into 39 distinct “Na-



Point Pelee
National Park

Introduction

tional Park Natural Regions" based on (the appearance of the land) and vegetation. The goal of the System Plan is to represent each natural region in the national parks system. This approach has provided a policy framework as well as a goal which has guided the expansion of the national parks system since that time.

When the system is complete, future generations will be able to experience in our national parks the biophysical diversity of Canada - examples of the

Pacific coast, the Rockies, the prairie grasslands, the boreal plains, the tundra hills, the Precambrian shield, the Arctic Islands, the Atlantic coast and each of the other distinctive natural regions that define our landscape and shape our history.

To date, 24 natural regions are represented by the 38 national parks and national park reserves in the system (several natural regions, including the Rocky Mountains, contain more than one national park). There are also 4 additional natural regions where lands have been reserved specifically for future national parks. In these reserved areas, interim protection measures are applied pending the negotiation of final park establishment agreements.

The gaps in the system are in the Northwest Territories, Quebec, Labrador, Manitoba and British Columbia. National parks currently occupy about 2.25 percent of Ca-

nada; and when the system is complete they will likely cover about 3 percent. Work towards completion of the national parks system by the year 2000 continues to be a priority for Parks Canada. This means that by the turn of the century national park agreements should be in place to represent each natural region or, as a minimum, lands should be set aside for a future park.

National parks are not the only protected natural areas in Canada. They are part of a broader

family of Canadian heritage lands that includes provincial and territorial parks, wildlife areas, heritage rivers, regional parks, ecological reserves and lands under private stewardship. The international significance of some of these has been recognised through their designation as World Heritage Sites or Biosphere Reserves. But national parks occupy a special place among our heritage lands as the system protected for the benefit, education and enjoyment of all Canadians under legislation of the Parliament of Canada.



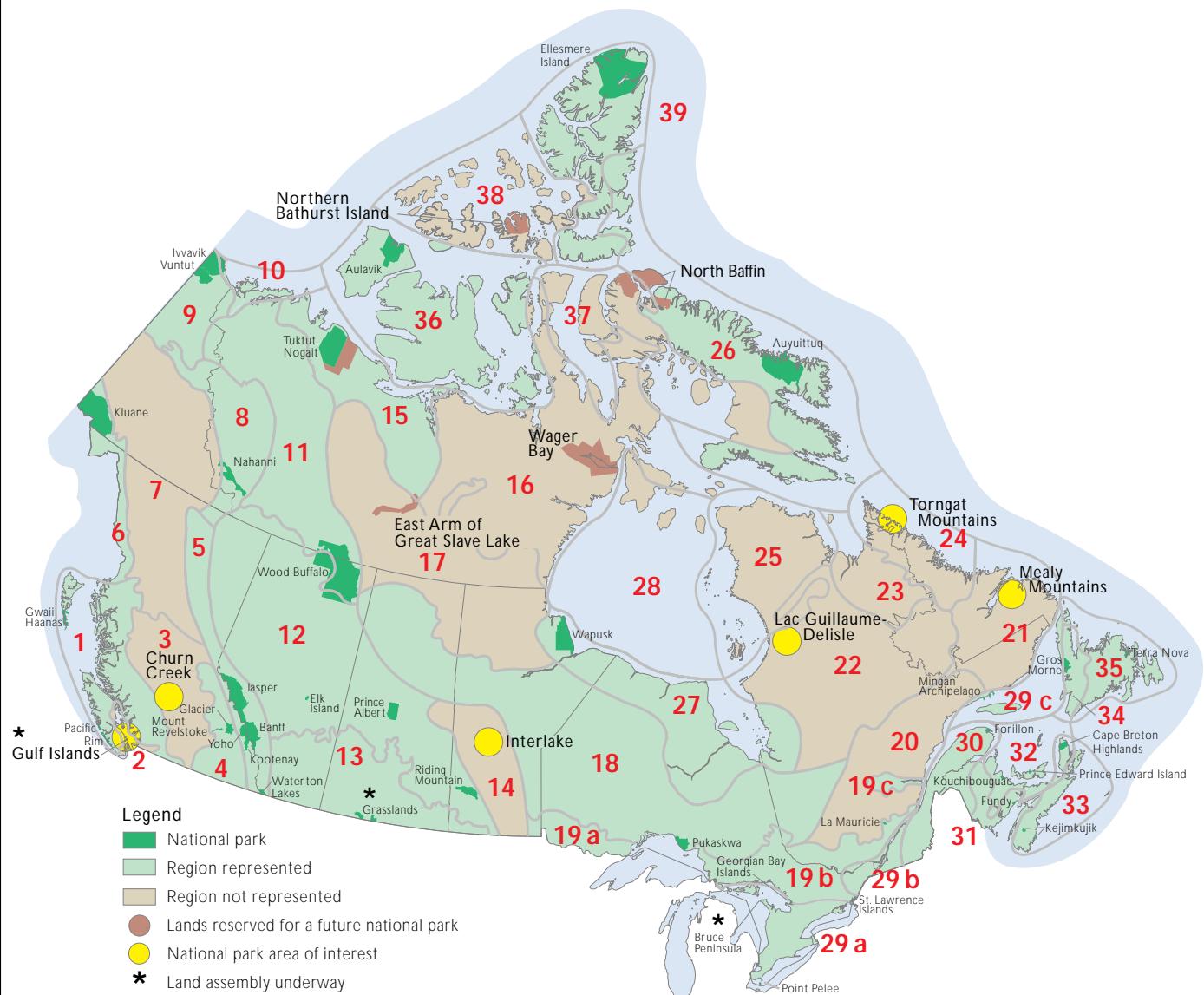
St.Croix Canadian Heritage River

HOW ARE NEW NATIONAL PARKS ESTABLISHED?

National parks are a special type of public lands administered by the federal government under the provisions of the National Parks Act. Identifying, selecting and establishing new national parks can be a long and complex process. Many of the import-

Status of Planning for Natural Regions

Chart



Introduction

ant factors for establishing new national parks are beyond the control of the federal government.

Although there is a sequence of steps followed for identifying, selecting and establishing new national parks, each situation is different, and the final result reflects the individual circumstances and the involvement of all those parties that are directly affected. The following paragraphs, however, give an overview and outline of the normal sequence of events.

Identifying Representative Natural Areas:



East Arm of Great Slave Lake

Because the goal is to represent each of Canada's 39 terrestrial natural regions in the national parks system, efforts to create new parks are concentrated on those natural regions that do not have a national park. In these regions, studies are carried out to identify areas worth consideration. To qualify, such areas must first contain a good representation of the natural features and processes characterising the region, including its wildlife, vegetation, geology and landforms. The second criterion is that human impact should be minimal; that is, the area should be in a natural state.



Aulavik National Park

Selecting Potential Park Areas:

Once representative natural areas have been identified in a natural region, further studies and consultations are undertaken to select one of these areas as a potential national park. In comparing possible areas at this stage, a wide range of factors is considered, including:

- *quality of natural region representation*
- *potential for supporting viable populations of native wildlife species*
- *ecological integrity of the area's ecosystems*
- *exceptional natural phenomena, and rare, threatened or endangered wildlife and vegetation*
- *significant cultural heritage features or landscapes*
- *opportunities for public understanding, education and enjoyment*
- *competing land and resource uses*
- *possible threats to the long-term sustainability of the area's ecosystems*
- *complementarity with objectives of other existing or planned protected natural areas in the region*
- *potential for establishing an adjacent national marine conservation area that is representative of its marine region*

Introduction



North Baffin Island, proposed national park

- *implications of Aboriginal rights, comprehensive land claims and treaties with Aboriginal peoples; and*
- *international criteria for national parks.*

Assessing Park Feasibility:

When a potential park area has been selected for the natural region, a new park proposal is prepared as the basis for a detailed feasibility assessment, including public consultations. The factors listed above are now studied in greater detail, with the direct involvement of the provincial or territorial government and in consultation with local communities, Aboriginal peoples, non-government organizations, relevant industries, other government departments and the interested public. Alternative land uses are sometimes explicitly considered and compared and, on lands under federal administration, a Mineral and Energy Resources Assessment is undertaken.

Possible boundaries of the potential national park are drawn to:

- *protect ecosystems and landscape features representative of the natural region*
- *accommodate the habitat requirements of viable populations of native wildlife species*
- *include an undisturbed area which is relatively unaffected by impacts originating from the surrounding landscape*
- *maintain the integrity of natural communities and drainage basins*
- *protect exceptional natural phenomena, and vulnerable, threatened or endangered wildlife and vegetation*
- *offer opportunities for public understanding and enjoyment*
- *minimize possible disruption of the social and economic life of the surrounding region; and*
- *include significant cultural heritage features or landscapes*
- *exclude permanent communities.*

If this assessment shows that a national park is feasible and that there is public support for this land use option, the governments may decide to proceed with negotiation of a park agreement. If a national park is not a feasible option, other representative natural areas are considered elsewhere in the natural region.

Proposed national park lands are sometimes “reserved” through appropriate federal or provincial legislation at some point during the feasibility assessment in order to provide interim protection pending final decisions.

Introduction

Negotiating a New Park Agreement:

For the National Parks Act and Regulations to apply, it is a constitutional requirement that national park lands must be federal government property. Within the provinces, where the provincial governments administer most lands, a federal-provincial agreement is usually negotiated whereby the province transfers administration and control of the land to the federal government for a new national park. Within the northern territories, it is the practice to seek the concurrence of the territorial government for a new national park through negotiation of a federal-territorial agreement. Where lands are subject to a comprehensive land claim by aboriginal people, a new park can be established as part of a negotiated claim settlement or a national park reserve can be established pending the resolution of the claim.

New park agreements cover many different topics depending on the circumstances. These may include:

- *final park boundaries*
- *cost-sharing for land acquisition*
- *details of land transfer*
- *traditional resource harvesting*
- *planning and management for the park and surrounding area*
- *composition and role of a park management board*

- *regional integration*
- *economic benefits.*

Establishing a New National Park in Legislation:

Once the responsible parties have agreed to create a new park with the lands to be administered by the federal government, the proposed new national park must be formally established under legislation of the

Parliament of Canada so that the National Parks Act and Regulations apply. In areas affected by an unresolved comprehensive native land claim, a national park reserves is established. The Act and Regulations apply, but traditional native hunting, trapping and fishing continue.

Boundaries and park establishment conditions will only be finally set on resolution of the claim.



Pitseolak, Auyuittuq National Park

Sometimes it takes years after signing of an Agreement for the federal government to obtain full title to the lands required for a national park. Reasons can include complications related to clearing land title and the time it takes to negotiate and purchase properties. In these cases a variety of alternative legislative tools are used in the interim.

Introduction

NEW NATIONAL PARKS AND ABORIGINAL PEOPLE

Many of the natural regions not yet represented in the national park system are in the Northwest Territories or in remote parts of the provinces. These are often areas in which Aboriginal people continue to rely on natural resources and in which native cultures reflect a close relationship to the land. While new national parks are a good way to protect and present a special place for all Canadians, they can also meet the specific needs of native communities. Parks Canada works closely with Aboriginal communities throughout the process of new park establishment in all cases where Aboriginal interests could be affected. The result is a new type of national park where traditional subsistence resource harvesting by Aboriginal people continues and where cooperative management approaches are designed to reflect Aboriginal rights and regional circumstances.

natural regions the resolution of comprehensive land claims presents a timely opportunity to create new national parks with the direct involvement of native people.

This report is a key step in charting the course toward the goal of establishing new national parks in Canada's unrepresented natural regions.

Completing the national park system in today's difficult fiscal climate presents special challenges. The Parks Canada Business Plan makes new parks a priority objective and provides a basis for establishing new parks even under these circumstances. The situation calls for the development of innovative, cost-effective approaches to new park establishment. For example, once park agreements are signed, Parks Canada's initial focus will be on ensuring that the lands are protected. Beyond protection, other programs will likely be phased in more slowly than in the past, and funding partners will be sought.

COMPLETING THE SYSTEM

Establishment of new national parks is becoming increasingly complex and time-consuming. Filling the remaining gaps in the system by the year 2000 is a difficult challenge. Little land exists now in Canada that does not have some kind of interest or commitment for uses such as oil and gas development, mining, hydro-electricity, forestry, agriculture and private recreation. Land-use and jurisdictional conflicts have to be resolved in co-operation with the provinces and territories, and the concerns of local residents have to be addressed. In some

Completion of the national parks system will not be achieved through the actions of the federal government alone. It will require consensus and determination on the part of all Canadians and all levels of government, and a recognition of the important contribution that national parks make toward the quality of our environment and the quality of our lives.

NATURAL REGION MAPS

Note that the 39 natural region maps that follow are at a scale of 1cm = 200 km.



Pacific Coast Mountains

Represented by: Pacific Rim and Gwaii Haanas
National Park Reserves

1

WILD AND WET

**It is from the land we get our strength,
from the sea we get our energy.**

Diane Brown (Kwakanat)
Haida Community Health Worker

THE LAND:

The biggest trees, the most rainfall, the longest and deepest fiords ... this region is known for Canadian superlatives. A distinctive climate and lofty mountains make this natural region stand alone, like an island, with unique plant and animal communities and living conditions.

In few other natural regions of Canada can one swim or walk through such a diversity of habitats, or experience such a variety of life, in so short a distance - from undersea kelp forests through lush rain forests to arctic conditions on mountain-top glaciers. The Coast Mountains cover most of the region, rising steeply from the fiords and channels. Mount Waddington, the highest mountain in British Columbia, is over 4,000 metres. Glaciers and snowfields cap the



West Coast Trail, Pacific Rim National Park Reserve tallest ranges. The mountains of Vancouver Island and the Queen Charlottes, although not high, make up in ruggedness what they lack in elevation. The Estevan Coastal Plain, a long narrow strip of rocky coastline, indented, wave-battered and wind-scorched, separates the mountains from the sea along the west coast of Vancouver Island.

The most striking feature of this region is the maze of fiords and channels that dissect the coastline from Vancouver to Alaska. These are classic fiords, some of the world's longest and deepest. They slash inland, up to 190 kilometres, with sheer sides plunging over 2,000 metres. The deepest fiord in the world is Findlayson Channel, with soundings of over 418 fathoms (795 metres).

The region lies within the Pacific Ring of Fire, an area of high volcanic and earthquake activity caused by the movement of crustal plates. Hot springs that beckon backcountry explorers bear testimony to crustal "hot spots" found throughout this region.



Long Beach, Pacific Rim National Park Reserve

Natural Region 1

VEGETATION:

The combination of heavy rainfall and year-round mild temperatures have resulted in some of the most spectacular old-growth temperate rain forests in the world. Here



South Moresby Island, Gwaii Haanas National Park Reserve

are the most productive forests, the biggest trees and some of the oldest trees in Canada - the Red Creek fir, a massive Douglas fir with a circumference of over 14 metres and a height of 80 metres, possibly Canada's biggest tree; the largest western red cedar, 20 metres in circumference, found on Meares Island; Carmanah Creek, site of the world's tallest sitka spruce (95metres); Cathedral Grove, dominated by Douglas fir as tall in feet as they are old in years - up to 250 feet (85 metres) and 250 years. Yet these are mere babes compared to many western red cedars, which can be over two millennia old.

Three main types of vegetation occur in Natural Region 1. The Coastal Western

Hemlock zone occurs only to about 600 metres above sea level. Douglas fir, sitka spruce, western red cedar and western hemlock are the dominant species in this zone. Between 600 metres and 900 metres above sea level is the sub-alpine mountain hemlock zone dominated by mountain hemlock and yellow cedar. As the elevation increases, the green cloak of evergreen forest begins to break up into krummholz - stunted clumps of trees. Above 900 metres is the third vegetation zone - treeless alpine tundra.

WILDLIFE:

The mainland coast of Natural Region 1 is a stronghold for grizzly bears, which feed heavily on salmon migrating to their spawning streams. Cougar, wolf, black bear, martin, black-tailed deer (a sub-species of mule deer), wapiti (elk), mountain goat, wolverine and fisher are some of the larger denizens of this region. Several endemic sub-species and species of wildlife have evolved on the islands of this region: the Vancouver Island marmot, found only in alpine meadows on Vancouver Island; the "blond" or "kermodei" bear, a pale subspecies of black bear found on a few north coastal islands; the Roosevelt elk, among others. Some of these endemics are rare or endangered; others, such as the Dawson caribou, once confined to Graham Island in the Queen Charlotte Islands, are now extinct.



Bald Eagle

The marine environment of this region supports an abundance of life unrivalled in Canada. Many large seabird colonies, some with populations of global significance, are found on islands along the coast of this region. Bald eagles are a common sight along the coast. The region's estuaries, rocky shorelines and beaches provide critical habitat for countless migrating shorebirds and waterfowl, including the trumpeter swan and sandhill crane.

STATUS OF NATIONAL PARKS:

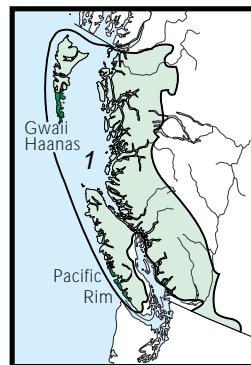
This region is represented by **Pacific Rim National Park Reserve** (500 km²) and **Gwaii Haanas National Park Reserve** (1,495 km²). Pacific Rim, representing the Estevan Coastal Plain portion of this region, is divided into three distinct units: Long Beach, a strip of uninterrupted surf-pounded beach backed by rain forest and including a marine component extending to the 10-fathom line; the Broken Group Islands, consisting of over 100 islands in a marine component; and a narrow strip along 77 kilometres of coastline that includes the challenging West Coast Trail and an inland wilderness watershed known as the Nitinat Triangle.

The first federal-provincial agreement for Pacific Rim was signed in 1970. This agreement was re-negotiated in 1987. Because the area is subject to the comprehensive claim of the Nuu-chah-nulth Tribal Council and the Ditidaht First Nation, it will be proclaimed as a national park reserve under the National Parks Act, pending the resolution of this claim.

Gwaii Haanas National Park Reserve, encompassing the rain forests and alpine meadows of the southern Queen Charlotte

Islands, harbours 39 species of plants and animals not found anywhere else on the globe. Gwaii Haanas, which means "islands of wonder and beauty", is the Haida name for this wilderness archipelago of 138 islands. Accessible only by boat or aircraft, this diverse area harbours over one-quarter of B.C.'s nesting seabirds, high concentrations of bald eagles and peregrine falcons, and Canada's largest sea lion rookery. Vegetation varies from endemic plants of the alpine meadows of the rugged San Christoval Mountains to the towering sitka spruce of coastal rain forests. The interplay of land and marine environments, coupled with the abundance of Haida heritage features, distinguishes this park reserve. The Haida legacy includes the historical village of Ninstints on Anthony Island, a UNESCO cultural World Heritage Site, as well as over 100 inventoried archaeological sites of an estimated total in excess of 450.

A federal-provincial agreement was signed in 1988 committing Canada and British Columbia to create a national park and an adjacent national marine conservation area. Recognizing that the area falls within the traditional territory of the Haida Nation that will be subject to treaty negotiation, an agreement was negotiated between Canada and the Council of the Haida Nation related to sharing in planning, operation and management. The National Parks Act is in the process of being amended to establish the national park reserve consistent with the above-mentioned agreements.



Strait of Georgia Lowlands

Unrepresented: Pacific Marine Heritage Legacy Memorandum of Understanding (MOU) signed in July 1995 provides for establishment of a national park



Gulf Islands

LIFE IN THE RAINSHADOW

Tucked under the rainshadow of the mountains of Vancouver Island and Washington's Olympic Peninsula, this region basks in a balmy Mediterranean climate. Warm dry summers and mild winters that rarely see snow, a frieze of islands and a fertile sea combine to create habitats found nowhere else in Canada

THE LAND:

From the air, the flat plains of the Fraser Delta and the southern corner of Vancouver Island stand out from the forests, mountains and glaciers that fence them in: a mosaic of rectangular fields, two major cities with spreading suburbs, roads, towns, hydro lines and a spattering of green and brown islands in the blue waters of the Strait of Georgia. This is the Strait of Georgia Lowlands Natural Region, the smallest and most urbanized natural region in Canada. Although the region makes up about 2% of the area of the British Columbia, it contains two-thirds of its population.

The range of physiographic forms in this small region, in combination with the region's mild Mediterranean climate, has resulted in a diverse and abundant array of plants and animals. Many of these plants and animals are at the northern extreme of their range and not found elsewhere in Canada.



Gulf Islands

VEGETATION:

The vegetation of this area is, in a word, unusual. Arbutus, with its constantly shedding smooth red bark, leathery evergreen leaves and twisted, muscular form; Garry oak, gnarled, dark and rough - these species are found nowhere else in Canada. Prickly pear cactus are abundant on some of the Gulf Islands. The dominant vegetation is more familiar - coastal Douglas fir, grand fir, western red cedar, lodgepole pine, Pacific dogwood (British Columbia's provincial flower), big leaf maple and red alder.

WILDLIFE:



At the bottom of Active Pass

Bendires shrew, California bat, Townsend's chipmunk, Douglas squirrel and western spotted skunk, among

Natural Region 2

many others, are found only in this region in Canada and are at the northern most limits of their ranges here. The black-tailed deer, a small sub-species of mule deer, is the most conspicuous large mammal and is abundant throughout the region. The mud flats and salt marshes of the Fraser River Estuary are critical areas for waterfowl and shorebirds. Millions of migrating birds flock here each year, feeding and resting before completing their journeys. Hundreds of thousands spend the winter. Alaksen Migratory Bird Sanctuary, covering 5.2 square kilometres of the Fraser Delta, is of such significance that it has been listed as a Ramsar site - a wetland of international importance. It is one of thirty such sites in Canada.



Pelagic Cormorant

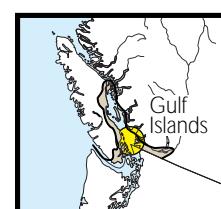
for a new national park and provincial protected areas in the Southern Gulf Islands, which encompass the highest concentration of the most ecologically significant and least disturbed properties within Region 2. Land acquisition is underway, and interim protection will be provided to the purchased lands. This joint land acquisition process represents an exciting new partnership approach suited to such a highly developed natural region.

STATUS OF NATIONAL PARKS:

Canada and British Columbia announced the Pacific Marine Heritage Legacy in July, 1995. A foremost objective of the Legacy is the acquisition of land before the year 2000



At the bottom of Active Pass



The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	done
Park Agreement Signed:	MOU signed
Scheduled under the National Parks Act :	0

3

Interior Dry Plateau

Unrepresented



LAND BETWEEN THE MOUNTAINS

Sandwiched between the Coast Mountains to the west and the Columbia and Rocky Mountains to the east, the Interior Dry Plateau is one of Canada's most diverse natural regions. Choose your clothes carefully for a hike here - within a few miles you can walk from parched "desert-like" conditions on valley bottoms, through moist sub-alpine forests to alpine tundra on mountain tops.



Chilcotin River Valley

THE LAND:

This natural region is characterized by flat or rolling plains, the result of immense lava outpourings 60 million years ago. The plains are dissected by deep narrow valleys, gorges and long, narrow lakes. Hell's Gate, famous with rafters on the Fraser River, is the best known of the river gorges typical of this region.

Lying in the rainshadow of the Coast and Cascade ranges, the region basks under almost guaranteed summer sun. In the parched bottomlands, the temperature can



Prickly Pear Cactus

rise to an oven-like 35 degrees Celsius or more. Due to the dry conditions, many species of wildlife occur, in Canada, only in the southern portion of the region where dryness combine with high temperatures produces desert-like conditions.

VEGETATION:

This is one of the most ecologically diverse regions in Canada, and a significant portion of the region's biota is found nowhere else in the country.

In the deepest valleys where the rainshadow effect is strongest is a mosaic of open ponderosa pine forests, sagebrush and bunchgrass. This is cowboy country, an almost-desert unique in Canada, where cactus, sagebrush, bitterroot, bitterbush and other species thrive. Above the open rangelands, forests of Douglas fir darken the higher plateau country. At still higher elevations, on moister slopes, is a narrow band where Engelmann spruce and alpine fir are the climax species. As a result of past fires, lodgepole pine is now the most common species in this zone. Finally, at the highest

Natural Region 3

elevations, patches of alpine tundra cover the mountain slopes.

Not only is there a significant altitudinal gradient within the region, but also a major latitudinal gradient; desert vegetation at the Canada-United States border gives way to boreal spruce forest at the northern end of the region in central B.C.

WILDLIFE:

The Interior Dry Plateau is home to a host of creatures that slither, scuttle, hop, run, glide and hover in the driest, deepest desert-like valleys: the pygmy horned lizard, western blue-tailed skink, tailed frog, Great Basin Spadefoot Toad, alligator lizard, rubber boa, yellowed-bellied racer, canyon wren, white-throated swift, white-headed woodpecker, black-chinned hummingbird (Canada's smallest bird), and California bighorn sheep. Scorpions and rattlesnakes are also encountered. And, of course, Lake Okanagan is the haunt of the mythological Ogo-pogo, Canada's most famous lake monster. These species, uncommon in Canada outside of Natural Region 3, share the region with more familiar creatures such as grizzly bears, mountain goats, wolverines, mountain caribou, badgers, white-tailed jackrabbits and cougars.

The almost-deserts of the driest valley bottoms - and their associated species- are among the rarest and most threatened habitats in Canada. Cattle ranching, sheep grazing and cultivation have already destroyed much of this arid habitat and reduced the populations of species already limited in number.

STATUS OF NATIONAL PARKS:

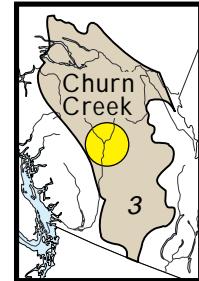
No national parks have been established in this region. The extent of development including land uses that are incompatible



Cougar

with national parks - urban growth, logging, sports hunting, ranching - is making this one of the most challenging unrepresented regions within which to establish a national park.

Parks Canada worked from 1991 - 1995 within the land use planning process of British Columbia in the Cariboo-Chilcotin region, seeking to promote the creation of a new national park in the Churn Creek area. A proposal covering an area of about 2,000 square kilometres was put forward for consideration. The national park proposal lacked widespread local support and so was not supported by the province, but two portions of the proposed national park area are to be protected through provincial programs. Further discussions with the provincial government are required before deciding on the next step towards representing this natural region in the national park system.



The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	partially
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0

4

Columbia Mountains

Represented by: Mt. Revelstoke and
Glacier National Parks



Avalanche Pass, Glacier National Park

IN THE LAND OF UP AND DOWN

...station and Hotel are within thirty minutes' walking distance of the Illecillewaet Glacier, from which, at the left, Sir Donald (10,808 ft.) rises a naked and abrupt pyramid....

*From an early CPR tourist brochure
describing Glacier House amid the
“Alps of North America”*



Mount Revelstoke National Park

THE LAND:

A vertical world of narrow valleys and canyons squeezed between sheer mountain walls. This region has up to 23 metres of snowfall each year, triggering avalanches and spawning glaciers and icefields. In the north and central areas, the ranges are wild, jagged and spectacularly rugged, contrasting with the rounded tamer summits, forested to the top, that prevail in the south.

Hot springs are a feature of the major valleys.

VEGETATION:

This is interior rain forest country. The

region has the greatest diversity of coniferous tree species in Canada, and the productivity of its forests is surpassed only by the coastal rain forests.

At low to middle elevations are luxuriant forests of western red cedar and western hemlock. Alpine larch adds a splash of gold to the uniform green-black of the forest in autumn.

Above the wet forest, dense stands of Engelmann spruce, alpine fir and lodgepole pine predominate up to the alpine tundra. A brilliant palette of colour - Indian paintbrush, lupine, arnica and other species - paint the lush green alpine meadows with burning red, fiery orange, electric blue....

Natural Region 4

WILDLIFE:

Here is a region where large mammals are still plentiful and where visitors are afforded many fine opportunities for big-game viewing. Most of the mammals of the western mountains are found here. Grizzly and black bear forage on the lush vegetation of avalanche slopes; mountain goats can be seen on sheer cliffs while slightly less daring Rocky Mountain bighorn sheep graze on steep slopes. Mule deer, white-tailed deer, elk and moose share the forests with wolves and cougar and wolverine. Pikas, mantled ground squirrels, hoary marmots and lemmings forage in the alpine meadows. The mountain caribou is disappearing from the region as mature forests are cut.

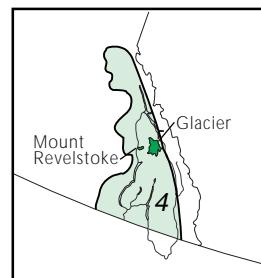
STATUS OF NATIONAL PARKS:

Two national parks represent this region, **Glacier** ($1,349 \text{ km}^2$) and **Mount Revelstoke** (260 km^2).

These parks preserve a sample of the rugged Columbia Mountains. The sharp peaks, avalanche-scarred slopes and sheets of perpetual ice and snow make these among the most rugged areas of western Canada. Over half of their area is above the tree line, a stark world of ice and rock. Heavy precipitation creates a lush forest of western red cedar and western hemlock in the valleys and feeding over 400 glaciers, some of which are visible from the highway. Plentiful snow and steep slopes combine to make these parks active avalanche areas. The many avalanche slopes provide excellent forage for both black and grizzly bears. Nakimu Cave in Glacier National Park, the second biggest cave system in Canada (next in size to Castleguard Cave in Banff National Park), is an underground fantasyland of "moon-milk", black pools and hidden waterfalls.



Mount Revelstoke National Park



Glacier National Park was established around Rogers Pass in 1886, a year after the Canadian Pacific Railway line had crossed the pass. With access provided by the CPR line, the spectacular mountain scenery and fine opportunities for skiing and mountaineering in this area attracted wealthy visitors before the turn of the century. North American mountaineering had its beginnings in Glacier National Park, and Mt. Revelstoke is generally acknowledged as the birthplace of alpine skiing in Canada. Mount Revelstoke National Park was established in 1914 after a group of citizens, impressed with its alpine flowers and mountain scenery, lobbied the federal government to preserve the area.

5

Rocky Mountains

Represented by: Jasper, Banff, Yoho, Kootenay, and Waterton Lakes National Parks



ROCKY MOUNTAIN HIGH! ... SEABEDS IN THE SKY

Glistening snow-capped peaks and thundering waterfalls, bugling elk and whistling marmots, lakes of startling turquoise and ice-blue glaciers - this natural region is postcard country. Within this region is some of the most famous and familiar mountain scenery in the world.



Mount Rundle, Banff National Park

THE LAND:

This region encompasses a series of parallel ranges including the Rocky Mountains and the foothills. These are orderly mountains, with wide sweeping valleys separating the ranges and open pine forests cloaking their shoulders. The sedimentary rocks making up the mountains of this region, sculpted by glaciers and rushing water, have resulted in distinctive, angular peaks. Many peaks exceed 3000 metres with Mt. Robson, at 3954 metres, being the highest.

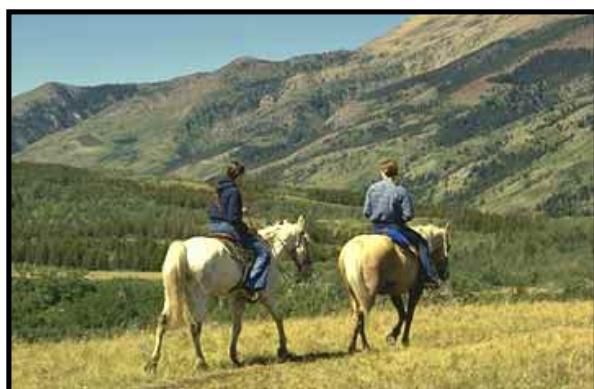
VEGETATION:

Dramatic climate changes caused by elevation, rainshadow effects and latitude create

a complex, diverse pattern of vegetation ranging from grasslands and alpine meadows to towering forests of evergreens. But the most dominant vegetation is the sub-alpine forest. This is a high forest, spreading down valleys below alpine meadows like a black tide. It can be an open, sunlit easy-to-walk-through forest typified by lodgepole pine or a dark, dense and damp forest of sharp-pointed Engelmann spruce and alpine fir. Alpine larch provide brilliant yellow patches of colour each autumn. Montane grasslands cover large areas along the valley bottomlands.

WILDLIFE:

This region is famous for its easily observed wildlife. In long-established parks such as Banff and Jasper, the wildlife has learned to tolerate and, in some cases, to exploit people, making these parks the premier place in North America for mammal-watching. A drive along the highways traversing the national parks almost guarantees sightings of moose, elk, mule deer, Rocky Mountain bighorn sheep, mountain goats, black bear or coyote. The region is also known for its game fish. Many species of trout, including non-native species such as brook and brown trout, thrive in the region's cold



Waterton Lakes National Parks

Natural Region 5



Big Horn Sheep

water rivers and streams alongside native rainbow, cutthroat and Dolly Varden.

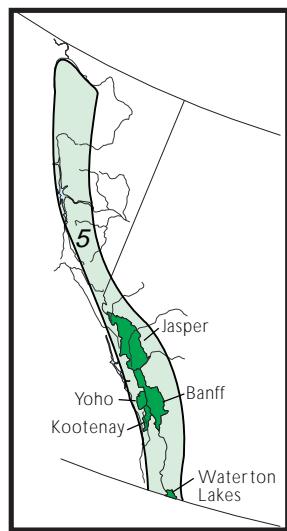
STATUS OF NATIONAL PARKS:

Canada's national parks system has its beginnings in this region over 100 years ago with the creation of a 26-square-kilometre national reserve around hot sulphur springs discovered near Banff. Since then, this reserve has grown to an area of 6,641 square kilometres and become known as **Banff National Park**. **Yoho** (1,313 km²) and **Waterton Lakes** (505 km²) were established by the federal government in 1886 and 1895 respectively; **Jasper** (10,878 km²) in 1907; and **Kootenay** (1,406 km²) in 1920. Today, the five national parks protect more than 12 percent of the region's area, providing representation of the geology, vegetation and wildlife of the Rocky Mountains.

Waterton Lakes National Park is linked with Montana's Glacier National Park as Waterton-Glacier International Peace Park, and in 1995 these two areas were declared a World Heritage Site based upon the exceptionally rich plant and mammal diversity and outstanding glacial and alpine scenery. Waterton Lakes National Park also forms the core area of the Waterton Biosphere Reserve, one of six biosphere reserves in Canada.

The contiguous block of Banff, Jasper, Kootenay and Yoho national parks, augmented by several provincial parks and

wilderness areas on its periphery, is among the largest protected areas in the mountains of North America. These four national parks, along with the provincial parks of Mount Robson, Mount Assiniboine and Hamber were declared a World Heritage Site because of their exceptional geological features and unspoiled beauty.



The sedimentary strata of the mountains — ancient seafloors compressed into rock and thrust into the sky — bear witness to events from a billion years ago to the age of mammals, the most complete sequence of sedimentary rocks found in Canada. The Burgess Shale Formation in Yoho National Park contains a remarkably preserved record of sea life from over 500 million years ago.

Astride the continental divide, the Columbia Icefield feeds rivers leading to three oceans - the Pacific, the Atlantic and the Arctic. The largest known cave system in Canada - Castleguard Cave - extends below the Columbia Icefield. No one yet knows just how far. One of the world's largest known underground rivers drains Medicine Lake, promising still larger cave systems waiting to be discovered. Some of the most famous hot springs in Canada are found here, including the Banff Hot Springs, which was the initial reason for establishing the first national park in Canada.



Mountain Goats

6 Northern Coast Mountains

Represented by: Kluane National Park Reserve



LOCKED IN THE ICE AGE

The highest mountains in Canada, the largest non-polar icefields, the fastest, longest glaciers. This is a land in flux, a young land, a land still in the throes of creation. Volcanoes have been at work here making mountains; glaciers and rivers are carrying them away. Flowing in slow-motion, glaciers move vast amounts of pulverized rock down the valleys, sculpting the landscape. Glaciers spawn rivers opaque with silt, rivers moving mountains.

THE LAND:

Mountains and glaciers - these are the essence of this region. Mount Logan, Canada's highest point at 5,951 metres, towers over the massive St. Elias range. The Boundary Ranges, running north-south along the Alaska panhandle, the second major mountain system making up this region, are no less spectacular. These two mountain ranges spawn thousands of glaciers. They spill down the



Mount Logan, Kluane National Park Reserve

valleys from massive icefields. Over 2000 glaciers are found in Kluane National Park Reserve alone. These are classic valley glaciers - some over 100 kilometres long - sinuously striped in black and white by gravel moraines.

The effects of the most recent Ice Age have not been dulled by erosion or hidden by vegetation. It is as if the ice sheets retreated yesterday. Broad U-shaped valleys, hanging valleys, cirques and other glacial landforms are evidence of their passing.

This region has some of Canada's most spectacular rivers. The Tatshenshini, the Alsek, the lower reaches of the Stikine - these and other wild, unfettered rivers provide breath-taking scenery and thrills for wilderness adventurers.



Lowell Glacier, Alsek River

VEGETATION:

The vegetation of this region is a composite of species from the coast, the western mountains, the boreal forest, the Arctic and the northern prairies, tentatively

Natural Region 6

poking up the valleys toward the glaciers and icefields. The coast forest of stately western hemlock and sitka spruce intrudes from the west; the boreal forest of sharp-pointed spruce marches up the glacier-carved valleys from the east. Alpine tundra and meadows, a complex mosaic of grasses, herbs, shrubs and dwarf trees adapted to a brief growing season and frequent snow throughout the year, prevail at higher elevations. In September, aspen brighten the mountain flanks with sheets of brilliant yellow.



Summit of Mount Logan

WILDLIFE:

This region is home to some of the continent's most spectacular wildlife, wildlife in scale to the size of the mountains. The largest sub-species of moose in the world is found here, with bulls weighing in at over 800 kilograms. The grizzly bears are almost as big as the moose. Dall's sheep, woodland caribou, mountain goats and other large mammals abound.

STATUS OF NATIONAL PARKS:

Kluane National Park and National Park Reserve (22,013 km²) includes many of

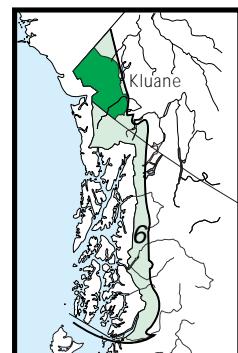


Dall's Sheep

the natural features, wildlife and vegetation that typify this region. A wilderness area famous for its abundant grizzly bears, Dall's sheep, caribou and mountain goats, it also includes the highest mountain in Canada (Mount Logan), vast ice fields and surging glaciers. Fringing the glaciers and mountains is a narrow "green belt" ranging from coniferous and deciduous forests to alpine tundra, covering about 18 percent of the park and providing important habitat for the park reserve's abundant wildlife.

In 1993, Canada, the Champagne and Aishihik First Nations and Yukon Government concluded a comprehensive land claim agreement. This resulted in the eastern portion of the park reserve lying in the claim area (about 30%) changing from reserve, to full national park status. Pending settlement of the Kluane First Nation and White River First Nation land claims, the remaining western portion remains a park reserve.

The park and park reserve, together with Tatshenshini-Alsek Wilderness Provincial Park in British Columbia, and Glacier Bay/Wrangle/St. Elias national parks in Alaska, form the largest international World Heritage Site in the world - approximately 85,000 square kilometres. Respective governments for the protected areas in the World Heritage Site, along with Aboriginal peoples, are considering an international arrangement to manage the areas in a complementary fashion



7

Northern Interior Plateaux and Mountains

Not represented



Grand Canyon of the Stikine

CINDER CONES, PLATEAUX AND CANYONS

... There's the land (Have you seen it?)
It's the land that I know,
From the big, dizzy mountains that screen it,
To the deep, deathlike valleys below

*from "The Spell of the Yukon",
Robert W. Service*



Gray Jay



Black Bear

THE LAND:

This is a large, complex region of mountains, broad plateaux, plains, basins and trenches. Glaciers and volcanoes have shaped this area extensively. The work of glaciers is present throughout, although only small icefields and glaciers exist today. A good example of active glaciers is found in the Kluane-Aiskinik area adjoining Kluane National Park Reserve. This is a rugged area where alpine Spatizi River glaciers have carved uplands into angular mountains and U-shaped valleys. The Yukon River-Southern Oglivies area includes



Spatizi River

mountains over 2,500 metres high with both glaciated and unglaciated mountain landscapes. Much of this area was spared from the Pleistocene glaciers, resulting in landforms that are rarely found elsewhere in Canada.

Several major rivers have carved deep canyons. The "Grand Canyon of the Stikine", where the river flows for 64 kilometres between sheer lava walls 100 metres or more in height, is one of the most spectacular river canyons in Canada. The largest lakes in British Columbia are found in this region. Mount Ed-

ziza, the apex of the Spectrum Ranges, features well-preserved examples of recent volcanic activity, including cinder cones, calderas, lava plains, dykes and other evidence of the earth's restlessness. Mt.

Edziza Provincial Park includes many of these volcanic features.



Wolf

VEGETATION:

Boreal forest dominates the region. Black spruce, white spruce and lodgepole pine are the most common species. Sub-alpine firs stand alone or in tight groves at the tree line. Aspen and birch paint the shorelines and lower mountain sides bright yellow in September. Broad belts of alpine tundra, lush neon-green with cow parsnip and lupines or in muted pastel shades of green, grey and rust with heather and dwarf birch, are found throughout the region at higher elevations.

WILDLIFE:

Moose, caribou, elk, Dall's and Stone's sheep, mountain goat, wolf, wolverine, black bear and grizzly bear thrive in this region. The region's many lakes and streams teem with rainbow, cutthroat and Dolly Varden trout, along with five species of salmon. The Spatsizi Plateau area is famous for its plentiful wildlife. Osborn caribou and Stone's sheep, two sub-species with limited ranges, find critical habitat in this area. Much of this

area is included in Spatsizi Plateau Wilderness Provincial Park. Gladys Lake Ecological Reserve, the largest in the province (486 km²), is completely surrounded by the provincial park. It was established to conduct research on non-hunted big game species.

STATUS OF NATIONAL PARKS:

No national parks exist yet in this region. Four representative natural areas were identified in studies carried out by Parks Canada in the early 1980s: Mt. Edziza (B.C.), Spatsizi Plateau (B.C.), Kluane-Aiskinik (Yukon) and Yukon River-Southern Ogilvies (Yukon). Because new information has come to light over the past decade and the region has been impacted by human disturbances over the same period, the regional analysis work is being updated.

Several factors could affect national park establishment in this region. The hydroelectric power generating potential of the large rivers draining these areas - the Stikine, Stewart, and Yukon - is vast. Dams, reservoirs, transmission line rights-



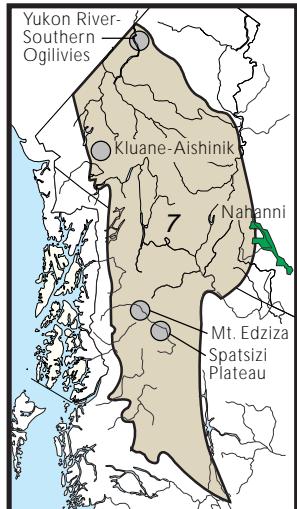
Spectrum Range B.C.

Natural Region 7



Mount Edziza

of-way and access roads would detract from the desirability of these areas for national park purposes. Big-game hunting and guiding is an important recreational and eco-



nomic activity in much of the region. Forestry is increasing in the region, particularly in the lower Stikine Valley. Much of the region has mineral claims on it, and mines are under development in the Spatsizi Plateau area south of the provincial park.

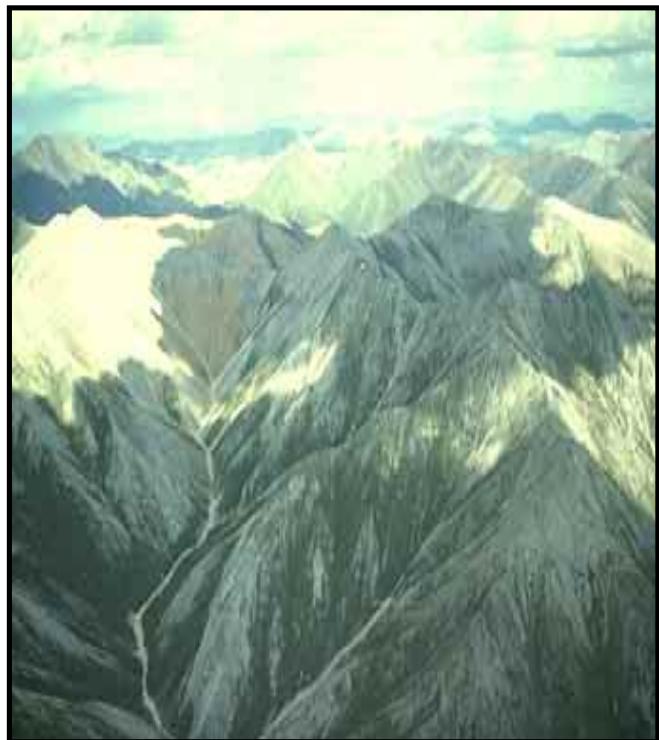
Much of the British Columbia portion of the region is covered by unsettled overlapping comprehensive land claims. The Champagne and Aishihik First Nations Final Agreement covering a portion of the natural region in the Yukon Territory has been settled.

Establishment of a national park in this

natural region will require the support and co-operation of the native peoples and the Government of British Columbia or the Yukon Territorial Government.

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	update underway
Potential Park Area Selected:	0
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Yukon River — Southern Oglivie areas



Mackenzie Mountains

Represented by: Nahanni National Park Reserve

8

LIMESTONE FANTASIES

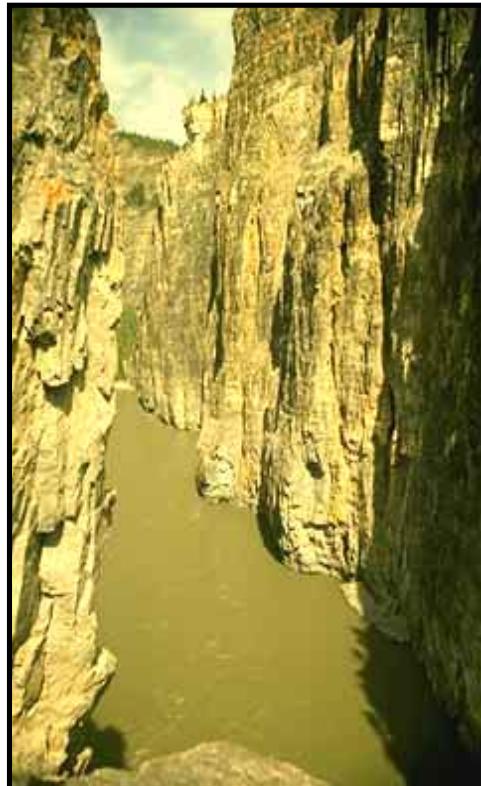
A complex land of magnificent beauty on a staggering scale. Boiling rivers sluicing through canyon walls that soar over a thousand metres upwards. Broad plateaux washed in shades of red by dwarf birch. Limestone fantasy-landscapes of sinkholes, pinnacles, rock bridges and stalactite-studded caves leading "God knows where".



Virginia Falls, Nahanni National Park Reserve

THE LAND:

This is a limestone land of mountains and broad plateaux. The wide sweeping valleys of the Mackenzie and Liard rivers cut through this region. Rivers slice through the extensive high plateaux and mountains, carving deep canyons. Those of the South Nahanni are best known, but similar breathtaking canyons are found along other rivers in this region. Some of the most spectacular karst formations in the world are located here.



South Nahanni River, Third Canyon

VEGETATION:

Dense boreal forests of white and black spruce, with stands of jack pine or lodgepole pine, cover the rolling uplands and terraces above the Mackenzie and Liard river valleys. Open boreal forests, interspersed with tundra covered by dwarf birch or grasses cloak the mountain flanks and high plateaux. Extensive areas of alpine tundra are found throughout this region.

Natural Region 8

WILDLIFE:

Large mammals include grizzly bear, black bear, woodland caribou, Dall's sheep, mountain goat, moose, wolf, wolverine, lynx and many more. Wood bison have been recently re-established in the Liard Valley.

The rare trumpeter swan breeds in this region. Because of the diversity of habitats - from spruce forests to alpine tundra - both arctic and temperate species thrive here.



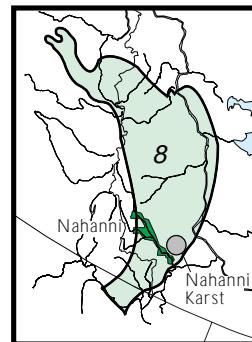
Golden Eagle

Act. Outstanding Aboriginal issues must be resolved by government before Nahanni can be proclaimed as a national park. Expansion of present boundaries should be considered in the future to improve natural theme representation, encompass additional visitor opportunities, and to help protect the ecological integrity of the park reserve. For example, important Dall's sheep habitat is currently excluded from the park reserve. Portions of the Nahanni Karst, Tlogotsho Plateau and Ragged Range areas have been identified for future study.

STATUS OF NATIONAL PARKS:

Nahanni National Park Reserve (4,765 km²) represents this natural region. One of Canada's great wild rivers, the South Nahanni, rushes through this World Heritage Site. Some of the deepest river canyons in the world, spectacular mountains, bizarre karstlands, and a wealth of wildlife give this park its marvellous and unique character. Virginia Falls, more than twice the height of Niagara, is the best-known feature of the park. Nahanni provides critical habitat for significant wildlife species such as Dall's sheep, black and grizzly bear, wolf, golden eagle, peregrine falcon and trumpeter swan.

Established in 1976, Nahanni is scheduled as a National Park Reserve under the National Parks



Canoeing the South Nahanni, a Canadian Heritage River



Northern Yukon

Represented by: Ivavik and Vuntut National Parks

9

COUNTRY OF THE CARIBOU

A land richer in wildlife, in variety of landscape and vegetation, and in archaeological value than any other in the Canadian Arctic. Here high mountains, spruce forests, tundra, wide 'flats' of lakes and ponds, majestic valleys ... come together to form the living fabric of the arctic wilderness...

*Dr. George Calef
Wildlife Biologist,
Canadian Wildlife Service*



Caribou

THE LAND:

Walking from north to south, the Northern Yukon divides into three landscapes: the rounded Richardson and British Mountains, the vast interior plains of the Old Crow Flats and the rolling Ogilvie Mountains. The Flats are covered with hundreds of rectangular lakes and meandering streams and rivers - a jigsaw water-maze.

Most of this region was bypassed by the Pleistocene glaciers. Vast sweeping pediments smooth the river valleys and isolated hills of frost-shattered rocks called tors,

among other testimonials to the absence of glaciation, give the region a unique appearance.

Many palaeontological and archaeological sites have been found. These include some of the best-preserved assemblages of Pleistocene fauna and evidence of human occupation in the Beringia Region that dates from 20 - 40,000 years B.P.

Natural Region 9

VEGETATION:

Tundra blankets much of the region - alpine, moist or wet. In the mountains and foothills, alpine tundra patterns the slopes in patches and stripes. Lichens and plants that grow as cushions or mats such as mountain avens, alpine bearberry, moss campion, woolly lousewort and purple saxifrage predominate. At lower elevations, moist tundra colours the land in the rich shades of golf greens. Cottongrass, the dominant plant, forms tussocks, making walking an ankle-twisting agony and quickly dispells any further comparisons to golf greens. A dense, waist-high jungle of willows grows along the rivers.

The interior plain supports open stands of stunted white or black spruce, interspersed with patches of tundra and rock barrens. The most northerly tongue of forest (white spruce) in Canada is found in this region along the valley of the Firth River. In the valleys in the southern part of the region, there are extensive stands of boreal forest.

WILDLIFE:

The large Porcupine Caribou Herd, estimated at about 160,000 animals, migrates through this region and into Alaska, wintering in the south and calving on the coastal plain. Moose are abundant in the forests of the Old Crow Flats and muskox have been reintroduced on the open tundra. All three species of bears - grizzly, black and polar - inhabit this region. One of the largest and



Margaret Lake, Ivvavik

most concentrated populations of grizzly bears left in the world is found here. Other wildlife includes arctic and red fox, arctic ground squirrel, arctic and snowshoe hare, lynx, wolf, wolverine and muskrat. The Old Crow Flats is renowned for its abundance of muskrats.

Although only four species of birds remain here throughout the year (the raven, willow ptarmigan, a few hardy gyrfalcons and snowy owls), the richness of the bird life in summer is staggering. Tundra swans, Canada geese and other waterfowl nest in the Old Crow Flats, one of the world's most important waterfowl habitats. The chorus



Old Crow Flats

arising from the tundra on a spring morning is as unforgettable as the silence of the tundra on a still winter night.

STATUS OF NATIONAL PARKS:

Ivvavik National Park (10,168 km²) and **Vuntut National Park** (4,345 km²) represent this natural region. Part of Ivvavik, the coastal plain portion, extends into the MacKenzie Delta Natural Region (Region 10). These two parks were initially both part of one national park proposal, first advanced in 1978, but were established as separate national parks at different times because they fall into two Aboriginal land claim areas. Planning and management of the two parks are coordinated to the greatest extent possible.

High mountains, broad river valleys, endless tundra and the Arctic seacoast come



Firth River

together within Ivvavik National Park to create a wilderness paradise. The Firth River is the centrepiece of the park, renowned for its beauty, white water rafting, archeological sites, and wildlife. The park includes part of the British Mountains, the only extensive non-glaciated mountain range in

Canada. These are rounded treeless mountains cut by smooth sweeping river valleys. The tree line - the limit beyond which trees do not grow higher than two metres - runs through this section of the park, which also harbours Canada's most northerly populations of moose and Dall's sheep.

Ivvavik was established in 1984 through agreement between the Inuvialuit of the Western Arctic and the Government of Canada. Initially known as Northern Yukon National Park, the park was given an Inuvialuit name in 1992. It is Canada's first national park established through a native-land claim settlement.

Vuntut National Park was established through settlement of the Vuntut Gwitchin First Nation Final Agreement, one of the Council for Yukon Indians comprehensive land claims, and scheduled under the National Parks Act in 1995. It includes a portion of the Old Crow Flats and represents the interior plain themes of the natural region. Part of the park is designated a Ramsar Site, a wetland of international importance.



10

Mackenzie Delta

Represented by: Ivvavik National Park and
Pingo Canadian Landmark



PINGOS AND PERMAFROST

A spongy world of pingos and permafrost, of stunted spruce forests and treeless tundra, of more water than land. A maze of shifting channels, shallow lakes and ephemeral islands. A land, too, where the traditional and the modern exist side by side.



Pingo

est, Ibyuk Hill, is 40 metres high. Patterned or polygonal ground, like the pattern of cracks seen on newly dried mud on a giant scale, is a major feature of this region.



Mackenzie Delta

THE LAND:

Natural Region 10 comprises three distinct areas – the delta of the present Mackenzie River, remnants of earlier deltas to the northeast, and the Yukon Coastal Plain to the west. The coastal plain, about 20 kilometres wide, slopes gently to the Beaufort Sea. Permafrost is a dominant factor in this region, influencing vegetation and landforms.

The present delta, the largest river delta in the Arctic, is as flat as the sea. It is a tracery of islands and lakes, a labyrinth of channels and oxbows. Scores of pingos (cone-shaped hills with a core of ice) provide the only relief in this flat land. Here is found the highest concentration of pingos in the world. The tall-

This land has traditionally been populated by both Inuvialuit and Gwich'en Dene. With about 6,000 residents in various communities, this is also one of the most populated of the northern natural regions - a notable concentration given the small size of the region. This reflects the relative richness of the land.

VEGETATION:

Two types of vegetation dominate. Along the Beaufort Sea is the Low Arctic or tundra zone; inland and southward is forest-tundra.

The Low Arctic vegetation is typified by dwarf shrubs, sedges and herbs. On well-drained sites, woody species such as dwarf birch, willow, Labrador tea, alder and various species of the blueberry clan are typical; on wet sites, sedges and willows dominate.

The forest-tundra zone, as its name implies, is a mixture of trees and tundra. Here, open stands of stunted black spruce, white spruce and tamarack grow over a ground cover of dwarf tundra vegetation. These are the most northerly trees in Canada. The spruce here are commonly about three metres in height and 250 years old.

WILDLIFE:

The juxtaposition of tundra and forest in this region provides for a variety of wildlife not

Natural Region 10

often seen this far north. The tundra provides important summer range and calving grounds for caribou; the forest-tundra zone provides critical winter range. Black bears reach the northern limit of their range here. Red fox and arctic fox, wolves, grizzly bears, muskrat, beaver, lemming, rock ptarmigan, spruce grouse and raven are characteristic wildlife. Muskox are common. The delta is a critical staging and nesting area for shorebirds and waterfowl. Hundreds of thousands of snow geese stop at the outer delta islands and on the coastal plain each fall to accumulate fat for the long migration south, covering the land like a dusting of snow. Beluga whales congregate offshore. Farther out to sea in the Arctic Ocean, is an important migration route and feeding area for the rare bowhead whale.

STATUS OF NATIONAL PARKS:

About 2,400 square kilometres, or one-quarter, of the northernmost part of **Ivvavik National Park** extends into the coastal plain portion of the Mackenzie Delta Natural Region, protecting about 6 percent of the total region. It is dominated by the massive fan deltas of the Firth and Malcolm rivers draining north from the British Mountains and provides habitat



Ivvavik National Park

portion of the park. The coastal plain here is also a very important staging area for migrating snow geese.

None of the Mackenzie Delta, the namesake for this natural region, is included within the national park. The Babbage River delta, however, shares many of the same characteristics as the delta of the Mackenzie River, and part of the Babbage River delta lies within the park - the east shore of the river forms the park's eastern boundary. It is particularly important here to work through the Wildlife Management Advisory Council of the North Slope to manage the entire Babbage River delta in an integrated fashion.

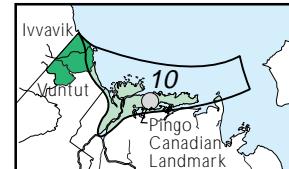


Belugas

for a variety of wildlife including polar bear, wolverine, golden eagle, peregrine falcon, gyrfalcon, and arctic char. The majority of muskox in Ivvavik are found on the coastal plain. The Canadian portion of the calving ground of the Porcupine Caribou Herd lies within this

Pingo Canadian Landmark is Canada's first, and only, landmark. Established through the Inuvialuit Final Agreement, this area is situated on the Tuktoyaktuk Peninsula and contains an outstanding concentration of pingos and other permafrost phenomenon, including Canada's highest pingo. The Pingo Canadian Landmark, through protecting these features, rounds out representation of the natural region.

See Natural Region 9 for details on establishment of Ivvavik National Park.



11

Northern Boreal Plains

Represented by: Wood Buffalo National Park



Whooping Crane

WHOOPING CRANES AND BOREAL PLAINS

A vast wild plain spread with bogs, forests, meandering streams and spongy muskeg that has changed little since long before the days of the fur traders. Some of Canada's largest rivers and lakes are found in this region.

THE LAND:

What makes this region stand out is that nothing in it does - at least in terms of topography. Lowlands, plains and plateaux, underlain by horizontal beds of sedimentary rock, give this region its typical subdued relief.

What does make this region stand out are the two huge lakes, Great Bear and Great Slave, on its eastern edge and Canada's largest river, the Mackenzie. Major tributaries of the Mackenzie - the Liard, Peace, Slave - and a network of smaller rivers and streams shape the character of this region with broad floodplains crisscrossed with meandering channels and oxbow lakes.

VEGETATION:

Although this region covers a vast range of latitude, spruce prevails throughout. In its northern reaches, open spruce forests with an understory of grey-green lichens provide winter range for caribou. Milder sites support dense forests of spruce mixed with balsam poplar, birch and aspen. In poorly drained sites, forests of black spruce and tamarack prevail - their shallow root sys-

tems spread wide in the thin layer of soggy soil. Vast treeless areas cover large parts of the region.

WILDLIFE:

The wildlife of this region is remarkable for its impermanence. Vast numbers of migratory birds take advantage of the super-abundance of food - especially insects - in the brief summer. But the long, bitterly cold winters make this region a harsh environment for year-round residents. These include the muskrat, beaver, wolf, coyote, red fox, black and grizzly bear, lynx, moose, caribou and, of course, the bison.



Wood Buffalo National Park

Natural Region 11

STATUS OF NATIONAL PARKS:

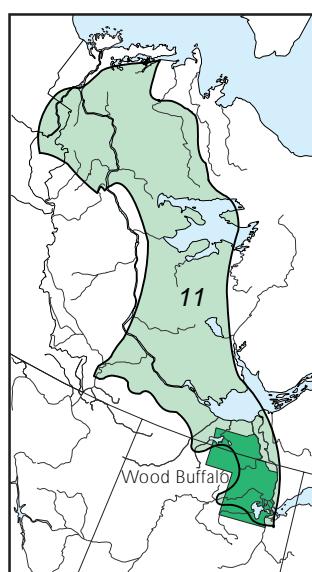
Wood Buffalo National Park (44,802 km²) represents this region. Small portions of the park also extend into Natural Regions 12 and 17. A World Heritage Site and home to the world's largest bison herd and the only known nesting site of the whooping crane, this is Canada's largest national park; it is also one of the largest in the world. This vast wilderness of bogs, forests, meandering streams, huge silty rivers and great tracts of spongy muskeg has changed little since prehistoric times. The sprawling Peace-Athabasca Delta, one of the world's largest inland deltas and a Ramsar site (a wetland habitat of global significance), is encompassed by the park. It is also one of the world's most impressive wildlife areas. Huge flocks of geese, swans, ducks and other water birds funnel through here each spring on their northward migration. Millions stay to nest.

Between 1925 and 1928, almost 7,000 plains bison were transported from Wainwright in southern Alberta to the park. This decision, well-intended though it was, brought disease in the form of tuberculosis and brucellosis, and resulted in the hybridization of the wood bison herd in the park (a separate sub-species) with the plains bison.



Wood Bison

Wood Buffalo National Park was established in 1922 by federal Order-in-Council under the Dominion Forest Reserves and Parks Act to preserve the habitat of the wood bison. It was expanded in 1926 to its present size. Since that time, local Aboriginal people have continued to hunt, trap and fish within the park, making this the park in Canada with the longest-standing tradition of Native subsistence use. With the settlement of the Cree Band of Fort Chipewyan Land Claim in 1986, formal mechanisms were set up for the Mikisew Cree to participate in management decisions within its traditional territory in the park.



12

Southern Boreal Plains & Plateaux

Represented by: Wood Buffalo, (8% of total area of park),
Riding Mountain, Elk Island, and Prince Albert National Parks



Prince Albert National Park

A REGION OF TRANSITION

A region of transition, from the dry, treeless prairies to the moist boreal forest, from intensely man-altered landscapes to pristine wilderness. Within this region are some of the most endangered habitats in Canada.



Riding Mountain National Park

THE LAND:

The topography of this region is a gentle blend of plains and plateaux, with a few widely scattered groups of low hills and wide river valleys. To the north is the Alberta Plateau, with hills reaching heights of about 200 metres. To the south are smooth plains. The underlying soft sedimentary bedrock has influenced the regular relief found in this region. Subsequent glaciation has modified the landscape, leaving rolling moraines on the uplands and fine-grained lacustrine deposits in lowland areas.

VEGETATION:

Although this region is one of continuous transition from prairie through deciduous forest to boreal forest, three distinctive vegetation zones are recognized. In the south, aspen parkland, a mosaic of trembling aspen groves and rough fescue grasslands, is the prevalent vegetation. This combination of communities forms a distinctive Canadian habitat that is unique in the world. Bordering the aspen parkland is a zone of mixed wood forest containing various combinations of coniferous species

Natural Region 12



Beaver, re-introduced to Elk Island National Park

(white spruce and balsam fir) and deciduous species (white birch, trembling aspen, balsam poplar). At the extreme north end of this natural region, seemingly endless stretches of black spruce muskeg dominate much of the flat, poorly drained land

The aspen parkland is extremely productive wildlife habitat. White-tailed deer, coyotes, snowshoe hares and ground squirrels are conspicuous mammals. The numerous potholes in this zone provide for the highest density of breeding dabbling ducks in North America, particularly mallards, shovellers and pintails. In the past, vast herds of bison ranged into this zone.

The northern forest zones, though not as rich in wildlife as the aspen parkland, are characterized by moose, black bear, muskrat, beaver, lynx, wolverine and wolf. Wood bison are resident in the extreme northern portions of this region. Some of the more notable migrants to the northernmost reaches of this region include the whooping crane, white pelican and sandhill crane.

STATUS OF NATIONAL PARKS:

Four national parks represent this natural region: **Elk Island** (194 km²), **Riding Mountain** (2,973 km²), **Prince Albert** (3,874 km²) and **Wood Buffalo** (3,584 km² or 8% of the total area of the park).

Elk Island is a fenced wildlife sanctuary of forested hills and rolling meadows surrounded by grain fields and pastures in the aspen parkland zone of this natural region. Wandering herds of plains bison and elk can be seen from scenic parkways and trails winding around lakes and beaver ponds. Public interest in the conservation of rapidly dwindling wildlife led to the establishment of Elk Island National Park in 1913.

Like Elk Island, Riding Mountain is an island of forest rising out of a sea of farmland. The park includes a diversity of landscapes - evergreen and hardwood forests, rolling hills, valleys, lakes and streams. A highland plateau in the centre of North America, the park is a crossroads where prairie, boreal and deciduous life zones mingle. The park is the core protected area of Rid-



Elk Island National Park

Natural Region 12

ing Mountain Biosphere Reserve. The park was set aside by the federal government in 1929 as part of the Riding Mountain Forest Reserve.

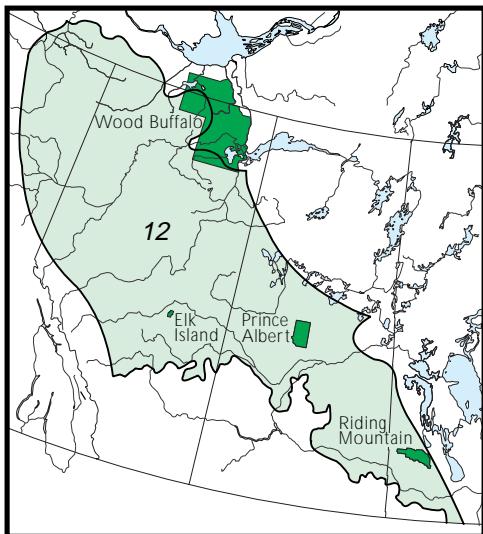
Bounded to the south by farmland, Prince Albert exhibits the variety of vegetation and landscapes that typifies this region. Pockets of aspen parklands and fescue prairies in the south of the park blend with mixed wood forests and boreal forests in the park's northern reaches. A network of lakes and rivers makes this a popular park for canoeists. For seven years, from 1931 to 1938, Grey Owl, the controversial conservationist, lived on the shore of Ajawaan Lake in the park. The park was established in 1927 by the federal government to "preserve in



Riding Mountain National Park

perpetuity a portion of the primitive forest and lake country of Northern Saskatchewan and to provide for the people of Saskatchewan ... a great recreational area."

A description of Wood Buffalo National Park is included under Natural Region 11.





Prairie Grasslands

Represented by: Grasslands National Park

13



Grasslands

PRONGHORNS AND PRAIRIE DOGS

This natural region is often referred to in the past tense, in terms of what once was. It was once an ocean of grass, broken by wide wooded valleys and forest-clad hills. It was once Canada's richest wildlife region, reminiscent of the savannah country of East Africa. But we will never really know what it was like. Only the wind remains unchanged, blowing unceasingly across the sweeping plains.

THE LAND:

A vast tilted plain, the land rises gently until it ends abruptly at the foothills of the Rockies. The monotonous flatness is interrupted by weirdly eroded badlands, sand dunes, coulees, rocky canyons, potholes, hills and sweeping river valleys. This region rests on a thick mantle of rich, black soil that is cool and moist to the touch - some of the most fertile soils in the country. Within the fertile grasslands is "Palliser's Triangle", semi arid country considered unsuitable for agriculture or stock raising in the opinion of John Palliser, leader of a scientific expedition along the American boundary in 1857-1860.

VEGETATION:

Speargrass, wheatgrass, blue grama, rough fescue, bluebunch fescue, red fescue, needlegrass, little blue-stem - grass is the single characteristic common to the mosaic of habitats making up this region. Mixed prairie, dominated by speargrasses and wheatgrasses, is the most extensive grassland type in this region. Mixed Prairie, as its name implies, includes both tall and short grasses. Blue grama, a drought-re-



Prairie Crocus

Natural Region 13



Burrowing Owl

sistent short grass, is important in dry sites.

River valleys and old drainage channels, important routes for the invasion of plant species that survived the last glaciation beyond the edge of the ice sheet, harbour a rich variety of trees and shrubs: oaks, American elm, cottonwood, Manitoba maple,

and green ash, among others. Shallow depressions, some of which are periodically flooded, harbour communities of salt-resistant species, such as alkali grass and wild barley. The thousands of sloughs that characterize this region, ranging in area from a few square metres to several hectares, are dominated by tall sedges and grasses.

WILDLIFE:

It is difficult to imagine the richness of the wildlife of this natural region in pre-settlement days. Herds of bison so vast that they took days to pass, along with untold numbers of pronghorn antelope, mule deer, white-tailed deer and elk, roamed this wilderness of grass stalked by the prairie grizzly, prairie wolf, cougar and other predators.

Today only remnants of this rich fauna remain in the most remote and driest corners of the region. Here, species endemic to the prairies, such as the pronghorn antelope, black-tailed prairie dog and plains pocket gopher, can still be found. The black-footed ferret and greater prairie chicken once lived here, but are believed to have been extirpated.

Waterfowl nest in the potholes that dimple this region, earning it the title "The Duck

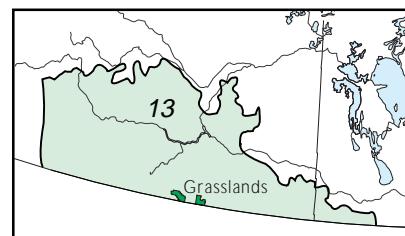
Factory of North America". The open grasslands still provide habitat for such unique prairie species as the sage grouse and sharp-tailed grouse, along with introduced species such as the ring-necked pheasant and the gray partridge.

Several interesting species of reptiles and amphibians are restricted in Canada to this region: the prairie rattlesnake, the eastern short-horned lizard, the plains spadefoot toad, and the great plains toad, among others.

THE STATUS OF NATIONAL PARKS:

This region is represented by **Grasslands National Park**. In the dry hills, badlands and eroded river valleys, a diversity of wildlife, including pronghorns, rattlesnakes and the only remaining black-tailed prairie dog colonies in Canada, can still be found in this wild corner of the prairies. Archeological investigations conducted to date reveal that the park is one of the richest areas of Northern Plains Indian culture in North America.

A 1981 agreement between the Governments of Canada and Saskatchewan, revised in 1988, provides for the establishment of the park encompassing 906 square kilometres. The park will be proclaimed under the National Parks Act once sufficient lands have been acquired. Approximately 50% (450 km²) of lands required for the park have already been acquired on a "willing-seller willing-buyer" basis.





Manitoba Lowlands

Not represented

14



Long Point

THE LAND:

This region is more than one-half covered by water - huge, shallow lakes, potholes, ponds and vast cattail marshes. These are the legacy of an immense glacial lake, Lake Agasiz, that once covered most of the area. Today, ridges of sand and gravel marking ancient beaches and shorelines separate the lakes and meander gracefully across the land. Underlain by flat beds of sedimentary rock, the uniform topography of this region is a product of the last glaciation - scoured by ice and smoothed by the deposition of sediments from ancient glacial meltwater lakes.

VEGETATION:

This region supports a diversity of vegetation, from spruce forest to prairie. The northern two-thirds of the region is a wilderness of spruce: white spruce mixed with birch and aspen on the better drained sites; black spruce mixed with tamarack on the wetter sites. A groveland dominated by burr-oak and aspen mixed with open prairie forms a broad transition to the true tall-grass prairie of the southern extremities of the region. A small remnant of tall-grass prairie, one of the few left in existence, is located in the city of Winnipeg and man-

A WILDERNESS OF WATER

A diversity of landscapes and life
- checkerboard wheat fields growing on gently rolling plains, river valleys burnished copper in fall with bur oak, buttery-green rolling meadows, sweeping sand beaches, broad shallow lakes and some of the most productive fresh-water marshes in North America.

aged as the Living Prairie Museum. Vast areas of the region are covered by cattail marshes.

WILDLIFE:

The spruce forests are inhabited by moose, black bear and sharp-tailed grouse, while the burr-oak groves and prairies are frequented by wildlife more typical of the prairies - white-tailed deer, coyote, and Franklin's and thirteen-lined ground squirrels. Bison, mule deer, pronghorn antelope, elk and wolf thrived here in the recent past.



Coyote

The extensive marshes of this region are critical nesting and staging areas for a myriad of birds, especially waterfowl. Delta Marsh, North America's largest fresh-water marsh, remains in a relatively undisturbed state. Winter denning sites for thousands of garter snakes are found along the limestone outcrops on the west side of Lake Winnipeg.

Natural Region 14



Eared Grebe

The shallow lakes covering much of this region support an abundance and diversity of fish species, as well as a thriving com-

mercial and sport fishing industry. Over 70 species have been recorded, with pike, whitefish, sauger and walleye the most important commercial species.

STATUS OF NATIONAL PARKS:

In 1994 Canada and Manitoba announced the commencement of the Manitoba Lowlands national park feasibility study - an investigation to determine the best option or combination of options for a national park to represent the Manitoba Lowlands natural region. The study focussed on three areas in Manitoba's Interlake - **Long Point, Little Limestone Lake and Hecla-Grindstone.**

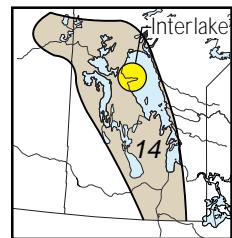
In early 1996 the governments announced the results of initial investigations and consultations, and initiated a second-round of public consultations. As a result of the initial work, a possible combination of three, and perhaps four, distinct examples of the region is being presented for public discussion - the park will in all likelihood consist of two or more geographically discrete components.

The combination includes the Long Point component - the core area of the proposed park - providing a land bridge connecting two of the world's outstanding freshwater lakes, Lake Winnipeg and Lake Winnipegosis. A mix of upland and lowland topography and associated wetlands, vegetation and habitats make this area particularly representative of the region. The overlap of the ranges of moose, elk, woodland caribou and deer is significant. The Limestone

Bay component contains caves carved by centuries of water erosion of the limestone bedrock, and a portion of Limestone Bay is important as spawning habitat for walleye. A third area focusing on Black Island, Deer Island and an assortment of small islands in Lake Winnipeg within Hecla Provincial Park displays unique features not occurring elsewhere in the proposed park, including the northernmost occurrence of red pine in Canada. Hecla Island itself would remain as a provincial park. A number of islands in Lake Winnipegosis are possible additions as a fourth component of the park because of their vast array of waterfowl and shorebird colonies, some of the greatest concentrations and diversities of inland colonial nesting bird species anywhere in Canada.

By using a combination of sites, features that would not have otherwise been present in a single-unit national park could be included. Each component brings unique and important characteristics to the mix and together they provide a good representation of the Manitoba Lowlands.

If at the conclusion of consultations the governments of Canada and Manitoba agree that a national park is feasible, negotiation of a federal-provincial agreement to establish the park will be the next step.



The following table summarizes the status of system planning for each step towards establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	ongoing
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Tundra Hills

Represented by: Tuktut Nogait National Park

15



Wilberforce Falls

THE LAND:

The western part of this region is underlain by sedimentary bedrock in undisturbed horizontal layers creating a landscape of plains, patterned ground and pingos. The eastern part of the region is part of the ancient Canadian Shield. Here the topography is rugged and hilly, with many lakes, large and small. The ice sheets have added the final touches to the landscape - eskers, drumlins, deposits of glacial till and other glacial features. Step-like series of raised cobble beaches and marine clay deposits more than 60 metres above sea level are a testimonial to the combination of higher sea levels in post-glacial times and the re-bounding of the land after being released from the weight of the glaciers. The rivers have cut deep gorges and canyons through the sedimentary bedrock. These have been compared to the canyons of the southwest United States. Wilberforce Falls on the Hood River is one of the most spectacular waterfalls in Canada.

Perhaps the most remarkable feature of this region is the "smoking hills", a site of slow-burning bituminous coal. In this land-

BREAKFAST WITH CARIBOU, LUNCH WITH MUSKOX

The coast consists of precipitous banks ... the shale was in a state of ignition in many places and the hot sulphureous airs from the land were strongly contrasted with the cold sea-breezes ... the baked clays of yellow, brown, white and red colours caused the place to resemble a brick field or pottery.

*J. Richardson, 1826,
describing the "Smoking Hills"*



Smoking Hills

scape, which resembles paintings of Hell, sulphur fumes have killed off the vegetation, and smoke billows from the cracks in the ash-covered ground.

VEGETATION:

More than 95 percent of this region is tundra - rock barrens where mountain avens and purple saxifrage grow in dense mats; polar deserts where only lichens can thrive; verdant wet sedge meadows; dense carpets

Natural Region 15

of willows, dwarf birch and heath vegetation. An undulating band of stunted, creeping spruce trees interspersed among the heaths and other typical tundra species extends into this region along river valleys, marking the northerly limit of tree growth.



Ptarmigan

for the Eskimo curlew, perhaps the rarest bird in Canada, is in this region. In the 1800s it existed in huge flocks, but by 1900 it was hovering on the brink of extinction, a victim of over-hunting.

WILDLIFE:

The wildlife of this region features few resident species and many summer migrants. This reflects the difference in the availability of food between the continuous summer sunshine and the long, dark winter.

Two major caribou herds, the Bluenose Herd and the Bathurst Herd, migrate throughout this region. Together they are estimated to number over 500,000 animals. Native peoples in the region still depend on the caribou as they have for thousands of years. There are also significant populations of muskox in the region that are recovering from over-hunting early in the 20th century.

The only known remaining nesting ground



Hornaday River

STATUS OF NATIONAL PARKS:

A national park establishment agreement was recently concluded by Canada, the Inuvialuit and the Government of the Northwest Territories, establishing **Tuktut Nogait National Park** (16,340 km²). This newest of Canada's national parks protects a significant portion of a larger national park proposal; the remaining part is protected by a land reserve pending completion of consultations and negotiations.

There are three land claim agreements which affect the study area. Tuktut Nogait National Park lies within the Inuvialuit Settlement Region, and encompasses about 58 percent of the study area. Within Nunavut, consultations with Inuit are underway. The Nunavut portion includes about 36 percent of the study area. Within the Sahtu Dene and Métis claim area, consultations are also in progress. The Sahtu portion includes about 6 percent of the proposed park.

Natural Region 15



Hornaday River

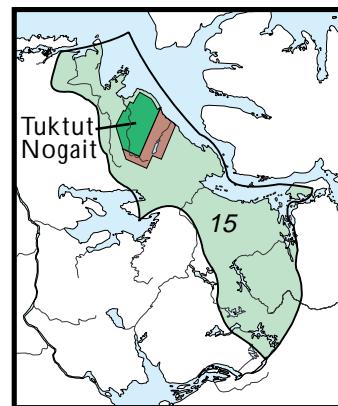
Completion of park agreements for the remaining part of the study area will require the support and co-operation of the residents of Kugluktuk, as well as Inuit, Dene and Métis, and the Government of the Northwest Territories. The continued support and cooperation of the residents of Paulatuk and the Inuvialuit is also important.



Bluenose Lake Area

The following table summarizes the status of system planning for each step towards establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	complete for Inuvialuit component
Park Agreement Signed:	complete for Inuvialuit component
Scheduled under the National Parks Act :	0



16

Central Tundra

Not represented: Lands are reseved for a national park on Wager Bay



Region 16

WHERE TIME AND LIGHT STAND STILL

Glorious it is to see,
The caribou flocking down from the
forests,
Spreading out over plains of white,
...Glorious it is to see,
The great musk oxen,
Gathering in herds...Glorious to see...

Traditional Inuit song recorded in the Report of the Fifth Thule Expedition, 1921-24

THE LAND:

Tundra superimposed on the Canadian Shield is the characteristic that makes this region stand out. The landscape is remarkably uniform - an endless series of low ridges, broken by a myriad of jigsaw-puzzle lakes and broad rivers. Evidence of surging Pleistocene glaciers is found throughout the region. Eskers wind across the land. Old beaches and deposits of marine clay over 200 metres above present sea level show that the entire region must have been awash in gigantic lakes and rivers at the melting of the last great ice sheets.

This region is wilderness unbroken, save for a few communities. However, evidence of human use is found throughout the region - inukshuks (stone markers), food caches, and hunters' blinds, pits and campsites that have been used for centuries.

VEGETATION:

The entire region is characterized by an



Muskox

almost continuous cover of low tundra vegetation consisting of dwarf birch, willow, Labrador tea, mountain avens and other tundra flowers, and various species of the blueberry clan. A broken fringe of boreal forest clings to sheltered river valleys.

WILDLIFE:

Here is the world of the Pleistocene, or as close as one can get to it today - a world where the wildlife remains in its primeval state. Here you can watch white wolves hunting among vast herds of caribou, barren-ground grizzlies patrolling their river-

Natural Region 16

bank domains and polar bears cruising the coast of Hudson Bay hunting for seals. Inland from the Hudson Bay coast, muskox bulls stare, stiff-legged, at human intruders. Along the Arctic coast, untold numbers of Canada geese, snow geese, tundra swans and other waterfowl nest and moult. Overhead, golden eagles, bald eagles, gyrfalcons, peregrine falcons, rough-legged hawks and other birds of prey soar.

STATUS OF NATIONAL PARKS:

While no national parks have yet been established in this natural region, in 1996 lands were reserved under the Territorial Lands Act for a national park in the Wager Bay area. This area has been proposed for a national park since 1978. Wager Bay, a veritable inland sea, extends more than 150 kilometres inland from Hudson Bay. Glacier-polished islands and shorelines, colourful cliffs and tidal flats backed by



Abandoned Hudson's Bay Post, Wager Bay

rolling tundra give this area its special appeal. A reversing falls and two polynyas (areas of the sea that never freeze) - one at the falls and the other at the mouth of Wager Bay - are features of special interest.

The wildlife that has attracted hunters to this area since ancient times still abounds. Polar bears congregate here in summer and can regularly be seen along the shore; peregrine falcons and gyrfalcons nest on the cliffs; caribou roam the tundra hills. Tent rings and meat caches are found along the shoreline, indicating that the area has long been a favoured hunting ground. Residents from Repulse Bay and other Keewatin communities still travel to the area to hunt for seals and caribou and to fish for arctic char.

Wager Bay remains almost completely untouched. There are no permanent inhabitants, although a commercial lodge was built in 1987 that caters primarily to natu-



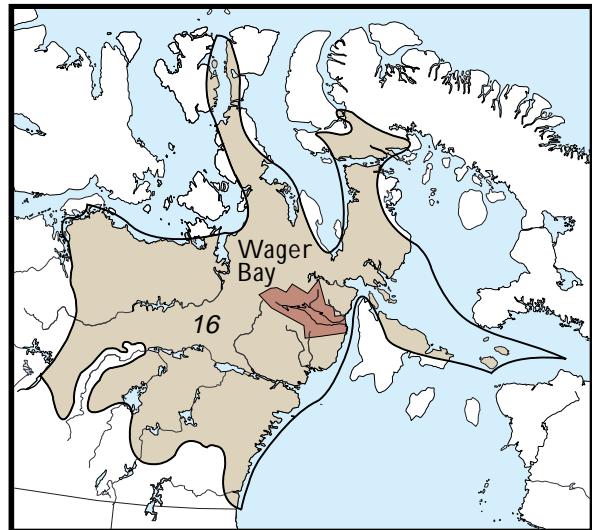
Caribou, Thelon Game Sanctuary

Natural Region 16

ralists. The entire natural region lies within the Nunavut Settlement Area, as defined in the Nunavut Land Claim Final Agreement. Under the terms of the claim, Inuit own lands on Wager Bay that may be exchanged for lands outside a national park, should a park be established.

A national park could only be established here with the consent of the Inuit of Kivalliq and the Government of the Northwest Territories. All technical studies have been completed and consultations with local residents in five communities and with representatives of the Kivalliq Inuit Association (KIA) are concluded. Parks Canada and KIA have initiated Inuit Impact and Benefit Agreement negotiations towards a national park, as stipulated through the land claim agreement.

There are unresolved concerns about a small area of high mineral potential within the proposed park in the headwaters of the Brown River. The mining industry would like to see this area excluded from a park. Positive findings in the area by the industry may also result in requests for transportation access through Wager Bay in the future.



Hanbury River

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	done
Park Agreement Signed:	0
Scheduled Under the National Parks Act:	0



Northwestern Boreal Uplands

Not represented: Lands on the East Arm of Great Slave Lake and Artillery Lake are reserved for a future national park

17



Great Slave Lake

"LAND OF LITTLE STICKS"

Lakes, lakes, lakes innumerable...The first bay we investigated ... developed into a baffling labyrinth of small enclosures and twisting points, islands and channels, hills, knolls, promontories, and even lakelets within lakes. God help the man who gets off the route in this country! Nothing - nothing to go by ... just thousands and thousands of caribou trails.

*from the journals of P.G. Downes,
on a trip from Reindeer Lake
to Nueltin Lake in 1939.*

THE LAND:

Ridge after low ridge of granite or gneiss, innumerable interlocking lakes and tumbling rivers, endless spruce forests - the edge of the Canadian Shield marks the western boundary of this region. Here the region abuts onto the great Shield-edge lakes - Great Bear, Great Slave, Athabasca, Wollaston, Reindeer, South Indian - famous for their interlocking convolutions of islands and bays.

The continental ice sheets have left their footprints on the entire region in the form of glacier-scoured lake-filled basins and large expanses of exposed bedrock smoothed and scoured by the passing glaciers. Erratics, boulders left behind by the melting of the glaciers, are sprinkled liberally over the land, and massive eskers, up to 75



Hoarfrost River

metres high, slither indiscriminately across lakes and over the land for tens of kilometres. Glacial erosion and deposition have left an intricate maze of labyrinthine lakes connected by short sections of rapid-strewn rivers.

VEGETATION:

This is a region of spruce forests. In the more temperate parts of the region, the shores of the lakes and rivers are heavily treed with dense forests of black spruce, white spruce and white birch. A closed-canopy forest of spruce and jack pine, with an understory of feather moss, lichens, blueberries and cranberries, covers the southern part of the region. Toward the north are open woodlands of black spruce

Natural Region 17

spaced 5-10 metres apart and rarely reaching 15 metres in height. A mat of lichens up to 15 centimetres thick carpets the ground between the trees. On the northern fringe of the region, even more open stands of stunted black spruce and tamarack with a ground cover of dwarf tundra vegetation form a transition to the barrenlands.

WILDLIFE:

This is a region rich in wildlife. Vast herds of caribou winter here in the spruce forests, some staying all year round. In late October, after the rutting season, the great bands of caribou mass up on the edge of the woods and spend the harshest winter months in the spruce and pine forests. The females start to work their way north again in February or March, bearing their young on the barren-grounds in June. By July, they are on the move again toward the forests.

The region has long been famous as a source of furs - beaver, muskrat, lynx, wolf, red fox, wolverine, martin, mink, otter. Moose and black bear are also abundant. Lake trout, whitefish and huge northern pike thrive in the cold, nutrient-poor lakes and rivers.

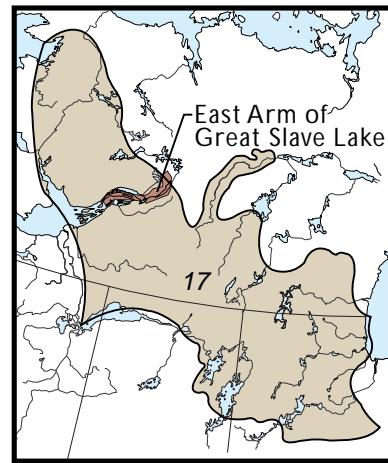
STATUS OF NATIONAL PARKS:

For more than 25 years, an area known as the **East Arm of Great Slave Lake** has been considered for a national park. In 1970, 7,150 square kilometres of land in this area were withdrawn under the Territorial Lands Act for national park purposes. This is a spectacular landscape - an immense archipelago of islands in Great Slave Lake, long fault-block escarpments, gorges and waterfalls, and much more.

Progress on this national park proposal has been stalled for some time. The Aboriginal people who will be most affected by the proposal are concerned about the effects of a national park on their traditional use of the land and on their lifestyle. There is no local consensus on whether a park would be appropriate.

The federal government has assured the people of Lutselk'e that a park will not be established without their agreement. Parks Canada expects to resume discussion on this park proposal with the people of Lutselk'e at the appropriate time in their Treaty 8 land entitlement negotiations. The support of the Government of the Northwest Territories is also required.

Other possible representative natural areas include Conjuror Bay on Great Bear Lake and Athabasca North Shore.



The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	stalled
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Central Boreal Uplands

18

Represented by: Pukaskwa National Park

. AN INFINITY OF ROCK, WATER AND WOOD

A rugged wilderness of endless spruce forests and quaking bogs, of rock-rimmed lakes and tumbling rivers teeming with walleye, pike and trout, of moose and beaver and hordes of black flies. This region is synonymous with the Canadian Shield, the quintessential Canadian landscape. The combination of rock, water and dense forest makes this region tough country to walk in. But it is a land made for the canoe.



Oiseau Bay, Pukaskwa National Park



Cascade River, Pukaskwa National Park

THE LAND:

This is a raw new land, still healing from the effects of the Ice Age. The ancient granite and gneiss of the Canadian Shield, lying exposed or covered by a thin acidic layer of grey-brown soil, give the entire region its characteristic rugged relief. The Precambrian rock is the clay from which this

landscape of rough hills was formed, but it was the glaciers that gave the land its final shape. The legacy of the glaciers can be seen everywhere - in the tortuous watersheds and the myriad of lakes, ponds and bogs; in the exposed glacier-scarred bedrock; and in the moraines and drumlins hidden under the never-ending spruce forests.

One of the few anomalies in the uniformity of this region is the Athabasca Sand Dunes. These are the most extensive sand dunes in Canada. Open shifting dunes intermix with stabilized dunes, resulting in a unique landscape characterized by an unusual assemblage of plants, many of which are restricted to this site.

VEGETATION

White spruce, black spruce, balsam fir ... white spruce, black spruce, balsam fir ...

Natural Region 18

this pattern repeats itself endlessly across the region. The forest is outstanding in its uniformity. Tamarack and jack pine, along with fast-growing



Beaver

deciduous species such as poplar and birch, are other important members of the forest cast. Along the southern edge of the region, white pine and red pine, sugar maple, black ash, eastern white cedar and other species from the Great Lakes-St. Lawrence forest intermix in sheltered areas and depressions in which soil has accumulated. Along the northern border, the harsh climate results in an open coniferous forest with a thick mat of lichens growing between the trees.

Numberless bogs and fens support black spruce, Labrador tea, blueberries and their kin, bog rosemary, cloudberry and other acid-loving species.

WILDLIFE:

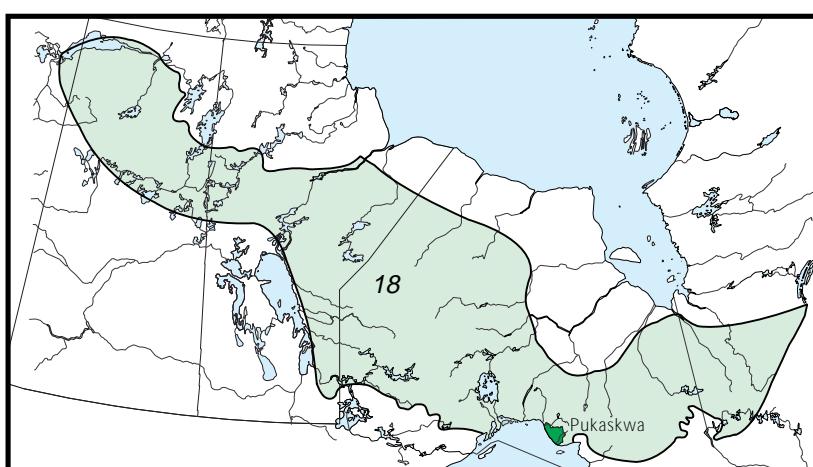
For many, the beaver is the symbol of this area. It was the desirability of its pelt that shaped the history of this region. For oth-

ers, the loon is the symbol of the boreal forest. Other typical wildlife include the moose, wolf, snowshoe hare, spruce grouse, ruffed grouse, lynx, black bear and caribou (old-growth forests providing their critical winter range). In summer, the spruce woods ring with the calls of warblers and other migratory birds.

STATUS OF NATIONAL PARKS

This region is represented by **Pukaskwa National Park** (1,878 km²), a rugged wilderness of rock-rimmed lakes, tumbling rivers and dense forests, bounded by the rocky headlands and sheltered cobble and sand beaches of Lake Superior. A small herd of woodland caribou, a rare species in Canada, shares the park hinterland with moose, wolf, black bear and a host of smaller creatures. Hike the challenging Coastal Trail or paddle the shore of Lake Superior to experience Pukaskwa's wild beauty.

Pukaskwa was established in 1978 pursuant to a federal-provincial agreement with the Government of Ontario. It is not yet proclaimed under that National Parks Act because outstanding claims by local First Nations are still being negotiated.





Great Lakes — St. Lawrence Precambrian Region

Represented by: St. Lawrence Islands, La Mauricie,
and Georgian Bay Islands National Parks

19



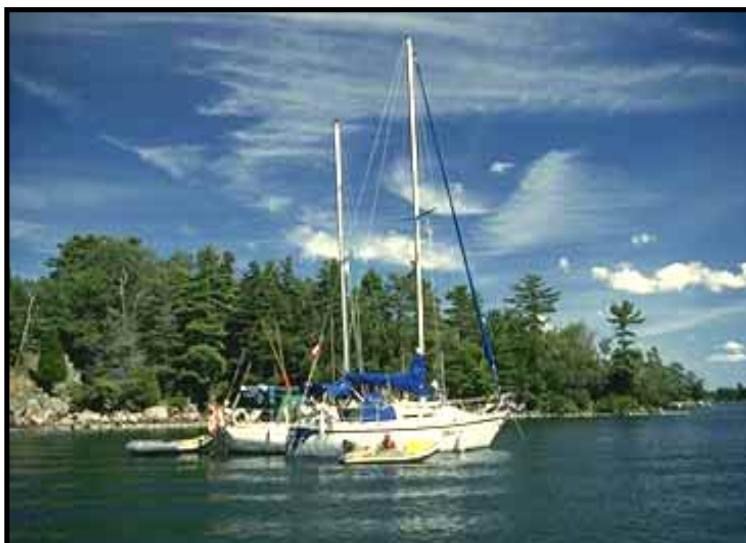
Common Loon

THE LAND

Although this region has three separate sections, it is united by two distinctive characteristics: the mixed forest of coniferous and deciduous trees and the ancient bedrock of the southern edge of the Canadian Shield. The entire region is a transition zone, where species from the decidu-

WHERE NORTH MEETS SOUTH

This is loon country, cottage country, famous for its dazzling autumn forests of scarlet and gold and its innumerable lakes and waterways. Like the boreal shield country to the north, this region is deeply ingrained into the image of Canada.



St. Lawrence Islands

ous forests to the south intermingle with those of the boreal forests to the north and, to a lesser extent, those from the western plains, the Atlantic coast and the Arctic. Each section is remarkably similar in appearance - knobbly wooded hills incised by rivers and streams and dotted with thousands of lakes. Rivers and streams run slowly, backed up by numerous beaver dams and rocky ledges. The effects of the Ice

Age are everywhere written on the land. Extensive areas of exposed bedrock are common, much of it scoured and scraped smooth by the passing of the glaciers; in other areas, glacial till or deposits left by ancient meltwater rivers soften the relief.

VEGETATION:

The three sections making up this region are covered with a mosaic of coniferous and deciduous forest that are aflame with colour each fall. The region is one of continuous transition, with many species reaching their

Natural Region 19

northern or southern range limits here. Along its northern border, species common to the boreal forest - white spruce, black spruce, white birch, jack pine, balsam fir - make up a high percentage of total forest cover. In the southern portion of the region, sugar maple, American beech, basswood, white elm, red maple and other species common to the pure deciduous forests predominate. Eastern hemlock, yellow birch, white pine and red pine are found throughout the region.



Red Fox

St. Lawrence Islands (9 km^2), **La Mauricie** (536 km^2) and **Georgian Bay Islands** (26 km^2). St. Lawrence Islands National Park, composed mainly of granite islands scattered for 80 kilometres along the St. Lawrence River, presents a remarkable diversity of flora and fauna, including many species considered rare, threatened or

endangered such as the pitch pine and the black rat snake. Each island has its own particular mix of species, depending on its size, bedrock and recent history. A short walk across many islands can take you from a hardwood forest typical of areas much further south to moist shady slopes where northern species flourish.

The islands that make up the park were formerly Indian lands, surrendered under treaty and held in trust by the Govern-

WILDLIFE:

This is also a region of transition for wildlife, with many species reaching their northern or southern range limits here. Wildlife typical of the boreal forest, such as moose, lynx, snowshoe hare and timber wolf are widespread, but reach their southern limits here. Chipmunk, mourning dove, cardinal and wood thrush are just a sampling of widespread species from southern forests that reach their northern limits here. Range limits change quickly in this region, reflecting the habitat alterations that are continuously occurring because of the effects of humans or natural fluctuations in climate, with some expanding northward and others spreading to the south. Many species have limited ranges or disjunct populations within this region - eastern hognose snake, black rat snake, eastern massasauga rattlesnake, eastern ribbon snake, southern flying squirrel, piping plover, the re-introduced wild turkey, and Blanding's turtle, among many others.

STATUS OF NATIONAL PARKS:

Three national parks represent this region:



Red Trillium

Natural Region 19



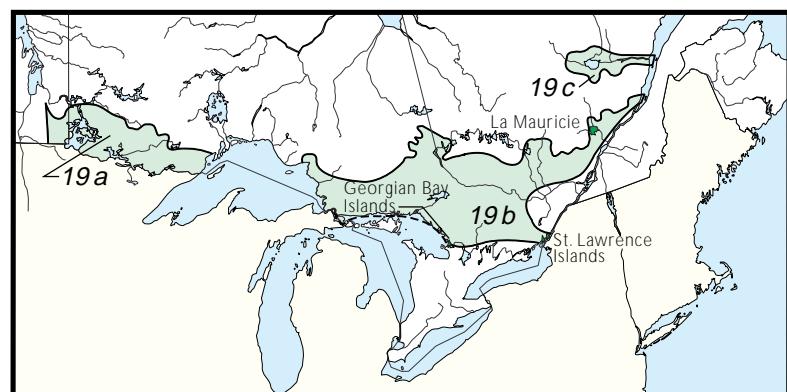
Autumn leaves,
La Mauricie National Park
the nucleus of the park, which was formally established in 1914.

La Mauricie National Park is quintessential “Shield Country”, a land of rich mixed-wood forests and over 150 lakes set into the gently rolling Laurentian Hills. Sport fishing for speckled and lake trout and canoe tripping along the routes that crisscross the park are the best ways to experience La Mauricie’s Laurentian heritage. The park was established in 1970 pursuant to a federal-provincial agreement with the Government of Quebec.

ment of Canada. By the turn of the century, many had been sold for summer homes. In 1904, local residents urged the federal government to reserve for the public nine islands designated for sale. These formed

Georgian Bay Islands National Park consists of 59 islands and shoals on the east side of Georgian Bay. The park is a transition between natural regions 29 and 19. This interface results in a merging of many habitats, giving the park a great diversity of flora and fauna and many rare species. More species of reptiles and amphibians, including the eastern Massasauga rattlesnake, are found here than in any other national park.

The islands making up the park were formerly Indian lands surrendered by the Chippewa in 1856 and held in trust by the Department of Indian Affairs. By the turn of the century, the Georgian Bay region had become a popular vacation area with waterfront lands quickly being bought up. With commendable foresight, the Commissioner of National Parks, J.B. Harkin, recommended the purchase of 28 islands from the Department of Indian Affairs in 1924. The park was formally scheduled in 1929.



20

Laurentian Boreal Highlands

Not represented



BALSAM, BOGS, BLACK FLIES AND BOREAL

This region at first appears monotonous in its simplicity. It is an elemental landscape - Precambrian bedrock scoured and softened by the work of glaciers, with a cold, damp climate giving the final brush-strokes - an uninterrupted cloak of gloomy boreal forest.



Manitou River



Bogs near St. Lawrence River

THE LAND

This region is most spectacular along its southern border, rising abruptly in bold headlands 300-600 metres from the St. Lawrence Estuary. Moving inland, the interior relief is rugged, undulating and deeply incised by large rivers tumbling downhill into the St. Lawrence. One of these, the Moisie, is famous among white-water wilderness adventurers.

The entire region is underlain by the Precambrian gneisses of the Canadian Shield. The Shield is shattered by two large meteorite craters: The Manicougan and the Mal-

baie. These have left distinctive marks on the normally impervious shield - a mountainous uplifted core at the centre of the strike and a circular depression marking the outer rim of the crater walls. (This feature of the Manicougan Crater has been flooded by hydro-electric power-generating dams and is easily visible on a map as a circle of lakes.)

VEGETATION:

This is a region of dark, damp and dense forests, spreading in uniform monotony along the St. Lawrence to the sea and northward to the tundra. The blanket of boreal forest is interrupted only by the valley of the Saguenay, where the mixed-forest of Region 19 makes a brief appearance.

But within the monotony is variety caused by fire and topography. From the air the land is a patchwork of colour - the black evergreen forest, bright green patches of deciduous trees, and pastel hues of brown and yellow marking the bogs.

A complete cross section of the boreal eco-

Natural Region 20

system exists in this region. In the southern portions, black spruce and balsam fir dominate, with stands of white birch where logging and fires have occurred. Farther inland, the forests of spruce and fir become denser, with a uniform understory of moss. Bogs blot large areas in sinuous stripes or Rorschach-shaped blotches. Along the northern edge of the region, black-spruce forests, perpetuated by fires, take over from the balsam fir. However, in undisturbed sites, the balsam fir is the climax species. White spruce grows on well-drained sites; bogs soak up excess water in poorly drained depressions.

WILDLIFE:

Caribou, moose, black bear, wolf, lynx, snowshoe hare and other mammals typical of the boreal forest are common here. Conspicuous birds include the pileated woodpecker (Canada's largest woodpecker), ruffed grouse and black duck.

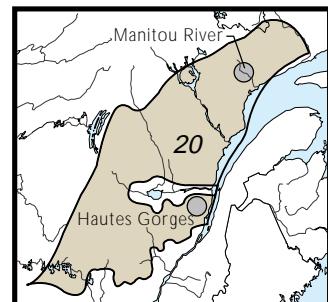


Lynx

The large rivers dropping rapidly into the Gulf of St. Lawrence provide important spawning grounds for Atlantic salmon. This region provides ideal conditions for two other creatures: the black fly and the spruce budworm. The region has plenty of cold, shallow swift-flowing streams, ideal nurseries for black flies. The spruce budworm, despite its name, prefers to feed on balsam fir, of which there are plenty in this region. The numbers of this species regularly reach epidemic proportions.

STATUS OF NATIONAL PARKS

No national parks exist yet in this region. Earlier studies pointed to Hautes Gorges and Manitou River areas for further study. A regional study re-examining these two areas in light of new information of the region's natural resources was recently completed, confirming the importance of both areas. Factors that could affect new park establishment include the settlement of native land claims, widespread logging, the hydroelectric power potential of this natural region's rivers and mining claims. Establishment of a national park will require the support and co-operation of the Government of Quebec and the resolution of the comprehensive land claim being negotiated with the Conseil Atikamekw, the Conseil Mamuitun and the Conseil Mamit Innuat.



The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	underway
Potential Park Area Selected:	0
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Mealy Mountains Area

SEA OF SPRUCE

“The land should not be called the New land, being composed of stones and horrible rugged rocks...I am rather inclined to believe that this is the land god gave to Cain”.

Jacques Cartier, 1534.

THE LAND:

This is the easternmost extension of the Canadian Shield. Along the southern edge of the region, the coastline resembles the edge of an unfinished jigsaw puzzle, with bold, jutting headlands, bays and a frieze



Mealy Mountains Area

of islands. From the Strait of Belle Isle, the land rises abruptly 200-400 metres to forested slopes dissected by swift rivers. Inland is a rolling plateau strewn with bogs and

amoeboid lakes woven together by a tracery of rivers full of rapids. Meandering eskers and lines of boulders crisscross the plateau.

The cold Labrador Current brings Arctic waters, chilling the land. Icebergs are often seen along the coast, earning it the nickname “Iceberg Alley”. Fog is frequent, and intense storms regularly buffet this region.

Several interesting historical sites are found in this area. At Red Bay, site of a Basque whaling station in the fifteenth century, the oldest shipwreck north of the Caribbean has been uncovered along with numerous artifacts.

VEGETATION:

The vegetation of this region is a continuous transition from boreal forest to arctic tundra. Along the exposed southeastern coast and interior uplands, the vegetation is similar to areas much further north - open stands of stunted black spruce with

Natural Region 21

an understory of dwarf birch, Labrador tea, lichen and moss. Many large treeless areas exist.

Around Lake Melville, a huge inland water body, magnificent stands of black spruce and balsam fir with an understory of feathermoss are common. This "high boreal" forest is valuable for wood pulp. The slow growth of the trees results in a denser fibre content and thus more wood pulp per unit volume than can be obtained from larger trees grown in more moderate climates.



Mealy Mountains Area

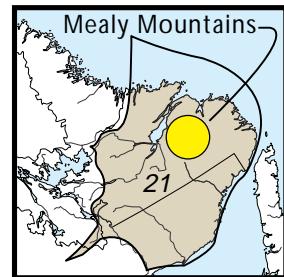
WILDLIFE:

Wildlife characteristic of the boreal forest thrives here: moose, caribou, black bear, red fox, lynx, snowshoe hare, wolf, spruce grouse, raven. Along the coast congregate seabirds and waterfowl: Atlantic puffins, murres, petrels, gannets, Canada geese, eider ducks, and black ducks, among others. Seals, whales and the occasional polar bear frequent the coast.

STATUS OF NATIONAL PARKS:

No national parks have yet been established in this region. Interest in a national

park in the Mealy Mountains area dates back to the early 1970s, when research identified it as a natural area of Canadian significance. Public consultations in the late 1970s concluded that, although there was strong public interest in a national park, further discussions should be put on hold until Aboriginal people could deal with the park proposal in the context of land claims negotiations.



The Mealy Mountains rise steeply out of tidal Lake Melville, reaching heights of over 1,200 metres. The highest peaks are snow-capped throughout most of the summer. In the mountains tree cover is sparse and the area stands out as a large island of arctic tundra. The largest herd of barren-ground caribou in the region frequents the proposed park area.

Establishment of a national park in this natural region would be done in partnership with the Government of Newfoundland and Labrador and Aboriginal people.

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



SPINDLY SPRUCE, ROCK AND ROARING RIVERS

The earth was created the way it was by the creator, and changing it is unnatural and wrong. The land and the rivers where the Cree people hunt and fish are a garden, a gift from the Creator...it has to be treated with love and respect to ensure that its spirit lives forever.

***John Petagumskum,
Cree Elder, 1990.***



THE LAND:

An endless patchwork of interconnected lakes, rivers full of rapids and falls, bogs, swamps, spruce forests and treeless barrens - this is an elemental land, split between water and bedrock, softened by a thin veneer of spruce forest and muskeg. Many large rivers drain westward into Hudson and James bays, dropping in a series of

steps over terraces marking ancient sea levels. Large lakes cover much of the region. The topography is gentle and undulating, broken occasionally by hills.

VEGETATION:

The term “boreal” in the name of this region implies that the boreal forest ecosystem is a dominant feature. But actually the vegetation of the region is a south to north transition from dense spruce forests to muskeg. Fire occurs frequently and is a major influence on vegetation.



Bog Rosemary

Black spruce is the dominant tree species. Closed crown forests are restricted to lowlands around lakes and along rivers. Most of the land is covered by a drunken chequerboard pattern of open black spruce woodland, low shrubs, open muskeg and



Natural Region 22

string bogs. As one moves towards the north of the region, the spruce become progressively more stunted and the stands more open. Shrubs such as dwarf birch, willow and Labrador tea cover a greater percentage of the land. Extensive poorly drained areas cover much of the region, with open wet black spruce woodlands, muskeg and string bogs stretching endlessly. From the air, string bogs appear as a series of sinuous light strips, like cooked spaghetti, floating across dark areas of open water. The "strings" are actually ridges of sphagnum moss growing on accumulations of peat. String bogs form on very gradual slopes, with the "strings" stretched across the bog at right angles to the slope.

WILDLIFE:

Characteristic wildlife include caribou, moose, black bear, red fox, arctic fox, snowshoe hare, spruce grouse, wolf, coyote, beaver, mink, lynx, and marten, among other typical wildlife of northern regions. Waterfowl, particularly tundra swans, snow geese and Canada geese, congregate along the shores of James Bay and Hudson Bay each fall to

feed. Belugas, bearded seals and harbour seals feed in the fertile waters offshore. Seals inhabit two inland lakes in the region, Lac-des-Loups-Marins and Petit-Lac-des-Loups-Marins, both of which are proposed ecological reserves. Whether these fresh-water seals are a separate species is under study.

STATUS OF NATIONAL PARKS:

No national parks exist yet in this region. The **Lac Guillaume-Delisle** area has been identified as the preferred location for a



Guillaume-Delisle's Cuesta

Natural Region 22

possible national park. Lac Guillaume-Delisle itself, once known as Richmond Gulf, is a vast brackish estuary linked to Hudson Bay by a narrow corridor. Outstanding features of this area include spectacular shoreline cliffs and the twin craters filled by Lac à l'Eau Claire (Clearwater Lake), the second largest natural lake in Quebec. The two adjoining craters are believed to be the remains of an ancient volcano or the result of a meteorite that split before hitting the earth. The Eau Claire River connecting the lake of the same name to Lac Guillaume-Delisle

is a chain of cascades and falls of remarkable beauty. The tree line passes through the proposed park area.

In 1989 the mayor of Umiujaq, a community on Hudson Bay, asked Parks Canada to consider the possibility of establishing a national park in the Lac Guillaume-Delisle area. Lac Guillaume-Delisle lies within the area covered by the James Bay and Northern Quebec Agreements (1975-1980). Some initial discussions have taken place, but a park proposal has yet to be developed.

Hydro-Québec has in the past proposed to develop La Grande Riviere de la Baleine, a major watershed just to the south of the Lac Guillaume-Delisle area, for hydro-electric power. These plans have been put on hold. In any case, it appears that the drainage basin of the Lac Guillaume-Delisle area would not be directly affected by such a

hydroelectric development project.

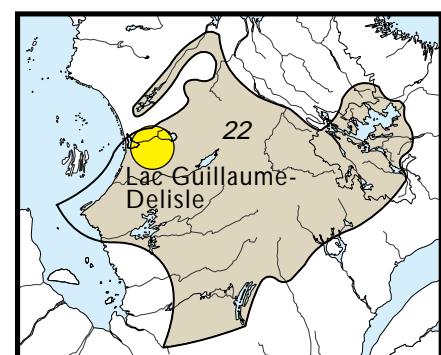
The establishment of a new national park in the Lac Guillaume-Delisle area will require the concurrence of the Government of Quebec, the people of Umiujaq and Makavik Corporation.



Natural Region 22

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0





Whale River

Not represented

23



Caniapiscau River

THE OTHER BAY OF GIANT TIDES

The deer [caribou] are the property of a spirit. The spirit sends them every year to the barren ground to feed in the summer and in the fall he drives them back east, to put them in a mountain which is so high that no Indian can go to the top of it, where they remain all winter, sheltered from the weather. The mountain is guarded by ants as large as frogs, by frogs as large as foxes, by foxes as large as wolves.... Should this spirit find the pelt of a deer ... left to rot, he would be so angry that he would search the whole country and not leave one deer for the Indian who left the skin in such a manner....

*As told to James Clouston,
explorer and fur trader, by
his guide in 1820.*



Koksoak River

THE LAND:

A saucer-shaped depression, in places a featureless plain, this region is bordered on the west by the rugged Labrador Hills and on the east by the ancient granite hills of the George Plateau. The unyielding bedrock of the Canadian Shield underlies this area, though it is often hidden under glacial deposits and features such as drumlins and moraines. Permafrost is present throughout much of the region. Broad boulder mudflats fringe the coast of Ungava Bay, which boasts some of the world's highest tides (as great as 18 metres) and strongest tidal currents.

Natural Region 23



George River

VEGETATION:

The vegetation of this region is transitional between tundra and taiga. Most of the region south of Ungava Bay is covered by open stands of black spruce interspersed with dwarf birch, northern Labrador tea and lichens, with shrubs accounting for about 50 percent of the ground cover. Denser forests grow along the major river valleys. These trees are surprisingly large for being so close to the tree line. A larch over 23 metres high on the Koksoak River and many black spruce over 17 metres have been recorded.

Along the coast of Ungava Bay is a nearly continuous cover of dwarf tundra vegetation less than 30 centimetres tall. Parallel to this zone is a narrow band of vegetation characterized by very open stands of stunted black spruce and tamarack. Tundra vegetation covers the ground between the trees. Many of the trees are so stunted that they appear more like recumbent shrubs. A few vertical branches a metre or more in height, bare except for a few living sprigs at the tip, remind one that these are trees. Vast areas of bogs and fens occur throughout the region. Sedges, sphagnum, northern Labrador tea and cotton grass are typical species growing on poorly drained areas.

WILDLIFE:

The numbers of caribou have increased in recent years to over 700,000 animals, making their home for at least part of the year in this region, bearing their young on calving grounds on the tundra plateaus near the Ford River, migrating in late June to the Labrador coast in order to escape the hordes of biting insects, and returning to the region's interior in August to winter.

Other characteristic wildlife species include moose, black bear, beaver, snowshoe hare and arctic fox. Arctic char are abundant in all large rivers in the region, along with Atlantic salmon. The mud flats on Ungava Bay provide important nesting and moulting habitat for snow geese, Canada geese and other waterfowl. Important murre colonies are located on Akpatok Island, and the waters near the island are important for seals, walrus and beluga whales.



Caribou

STATUS OF NATIONAL PARKS:

No national parks have yet been established in this region. Completing a regional analysis to identify representative natural areas is the first step. A study completed in 1995 suggested two areas that merit further consideration: **George River** and **Caniapiscau River**. Detailed field studies conducted in 1996 confirm that the George River area best represents the region and

Natural Region 23



Natural Region 23

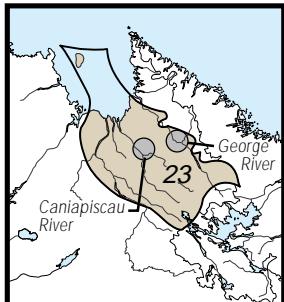
is the less disturbed of the two areas.

Both areas are within the area covered by the James Bay and Northern Quebec Agreements (1975-1980). Other factors that could influence park establishment include the hydro-electric power potential of these rivers and the high mineral potential of the Canadian Shield that underlies this region. Iron ore and nickel deposits have been discovered in the Labrador Hills in

the western part of the region, and have been developed in the vicinity of Schefferville.

The establishment of a new national park in this natural region will require the concurrence of the Government of Quebec, local Aboriginal people and Makavik Corporation.

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.



Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	in progress
Potential Park Area Selected:	complete
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0

24

Northern Labrador Mountains

Not represented



Miriam Lake, Torngat Mountains

THE UNKNOWN EASTERN MOUNTAINS

Breath-taking fiords, jagged peaks rising abruptly from a frigid sea, icebergs, polar bears, glaciers some of the most spectacular coastscapes in the world are found in this natural region - unknown to all but the Inuit.

THE LAND:

This region contains two distinct, contrasting landscapes: the George Plateau and the spectacular Torngat Mountains.

The George Plateau is a level bedrock plain cut by deep river valleys sloping gently to Ungava Bay. The effects of glaciation are ubiquitous: drumlin fields, kame terraces (ridges of water-born sediments deposited by melting glaciers), erratics and eskers that snake over the plateau.

The Torngat Mountains, among the highest, most rugged mountains in eastern North America and one of the world's most beautiful wild coastlines, provide a spectacular counterpoint to the gentle George Plateau.

VEGETATION:

Forest-tundra, characterized by open stands of black spruce and tamarack with an understory of low-lying arctic shrubs, dominates the southern part of the region. As one moves north and climbs higher, the vegetation becomes sparse, consisting mainly



Nachvak Fiord, Torngat Mountains

of lichens, mosses, sedges, grasses and hardy arctic flowers. Shrubs such as willow and alder are limited to sheltered areas. Rock deserts with little vegetation other than lichens and a few low-lying hardy forbs cover large areas.

WILDLIFE:

Typical mammals include caribou, black bear, red fox, arctic fox, snowshoe hare, wolf, and muskrat. The George River caribou herd, the world's largest, estimated at 700 000 animals, ranges through much of

Natural Region 24

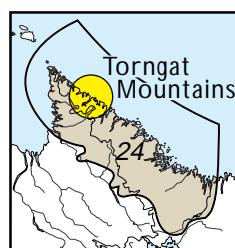
the region. Polar bears patrol the coast, although they are much less common than in the past. Seabirds such as puffins, murres, razorbills and others frequent the rocky islands offshore. Whales - killer, fin, humpback, minke and blue - harbour and ringed seals and the occasional walrus frequent the coast.

STATUS OF NATIONAL PARKS:

No national park has yet been established in this region. Interest in a national park in the Torngat Mountains dates back to the early 1970s, when research identified it as a natural area of Canadian significance. Public consultations in the late 1970s concluded that, although there was strong public interest in a national park, further discussions should be put on hold until the Labrador Inuit could deal with the park proposal in the context of their land claims negotiations.

In 1992, the Governments of Canada and Newfoundland and Labrador, and the Labrador Inuit Association, began a joint feasibility assessment to determine whether or not it is feasible to establish a national park in the Torngat Mountains.

The Torngat Mountain area is one of the most dramatic landscapes in eastern North America. Fiords slash inland 30-80 kilometres. Cliffs up to 900 metres high rise abruptly from the sea. Icebergs, set adrift two years earlier in Greenland, float by. Inland, the Torngat Mountains, lonely and austere, rip the sky, their sharp peaks reaching elevations of over 1,500 metres. These mountains resemble the western ranges in their ruggedness and



Nachvak Lake

scale. Broad U-shaped glacier-carved valleys, cirque lakes, glaciers, precipitous waterfalls - all these features are found in this mountainous region.

The establishment of a new national park in this natural region will be done in partnership with the Government of Newfoundland and Labrador and Inuit.

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	underway
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Nastapoka Falls

A SILENT, ENDLESS LAND

Scattered, patternless lakes, a litter of angular boulders and a pastel green and grey sweep of rock and low shrubs that goes on seemingly forever without change - silent except for the screams of circling hawks.

THE LAND:

This is a vast wild peneplain, strewn with low granite hills and strewn with boulders. The region is underlain by the bedrock of the Canadian Shield, which lies exposed over much of the land; in other places it is smoothed by a thin veneer of glacial drift. At the coast of Hudson Strait, the plateau stops abruptly, plunging precipitously as much as 600 metres to the sea.

The New Quebec Crater, the most spectacular and well-defined meteorite impact crater in Canada, is found in this region. This is a "simple crater" - a circular depression 260 metres deep in solid granite and 3 kilometres across, surrounded by walls over 150 metres high. One of the clearest lakes in the world fills much of the crater.

The climate is rigorous. There are really only two seasons - a long, bitterly cold winter and a brief cool summer. The lowest monthly temperature is never above freezing point. Snow lies from the end of September to the end of June, and in deeper ravines as late as the middle of July.



Hudson Bay Coast

VEGETATION:

This region is characterized by a nearly continuous cover of dwarf tundra vegetation, usually less than 30 centimetres tall. Creeping black spruce, dwarf birch, willow and woody shrubs such as northern Labrador tea, blueberry, crowberry, and bearberry are conspicuous species. In the brief fall, the leaves of the low arctic shrubs carpet the tundra in brilliant shades of red and orange.

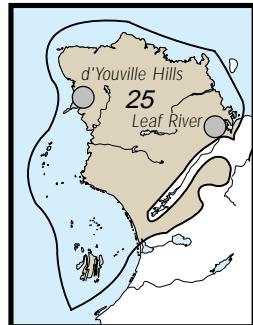
WILDLIFE:

Caribou find important summer range and calving grounds in this region. Other conspicuous land mammals include the wolf, arctic fox, red fox and lemming. Waterfowl such as Canada geese and snow geese nest

Natural Region 25

and moult throughout the region. Willow and rock ptarmigan are plentiful. Ptarmigan, along with ravens, are the only birds remaining here all year round. Hawks, particularly the rough-legged hawk and gyrfalcon, wheel and soar through the air on the lookout for lemmings or young ptarmigan. Snow buntings and Lapland longspurs flit silently among the lichen-covered boulders, stuffing their beaks with mosquitoes and gnats. Thick-billed murre and other seabirds nest on the cliffs along the north coast of the region. There are about 800 000 thick-billed murres at Digges Island and Cape Wolstenholme, the biggest colonies of this species in Canada. Large colo-

The Leaf River Estuary on Ungava Bay is the site of the highest tides in the world (18 metres). Broad tidal flats provide feeding and nesting areas for Canada geese and other waterfowl. Caribou and a small herd of musk-oxen inhabit the inland areas. D'Youville Hills (Povungnituk Hills) form a series of east-west ridges and valleys with a relatively high relief along the shore of Hudson Bay but of a more subdued character further inland.



Leaf River

nies of Eiders also nest on the offshore islands, and spend the entire year in Hudson Bay. Muskox were introduced to this region in the 1970s and 80s.

These two areas fall within the area covered by the James Bay and Northern Quebec Agreements. The establishment of a new national park in this natural region will require the concurrence of the Government of Quebec, local Aboriginal people and Makavik Corporation.

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

STATUS OF NATIONAL PARKS:

No national park has yet been established in this region. Based on a recently completed study, **Leaf River** and **d'Youville Hills** have been identified, but field studies are needed to confirm the degree to which these sites represent the natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	0
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0

26 Northern Davis Region

Represented by: Auyittuq National Park



"THE LAND THAT NEVER MELTS"

The Ice Age still grips this region of jagged peaks, deep fiords, looming glaciers and massive ice caps. But there is also a delicate beauty here ... pastel tundra flowers, soft mossy meadows, sparkling streams of glacial melt-water.



Bylot Island

THE LAND:

Ice and rock reign supreme in this natural region. The northern portion of the region is blanketed by thick ice caps and glaciers, smoothing the unevenness of the bedrock below. Tongues of ice touch the sea, calving glaciers into dark waters.

The east coast of Baffin Island presents a different face. This is a land of spectacular mountains, glaciers, deep fiords and the massive Penny Ice Cap. Here can be found classic alpine glacial scenery, the best in Canada and, in the opinion of some climbers, the best in the world.



Mt. Thor, Auyittuq National Park Reserve

A third face of this natural region is seen on western Baffin Island, where the mountains slope down to meet the coast in a low lake-studded coastal plain. In contrast to the east side, the coast is low, and broad intertidal flats are typical. The southern part of Baffin Island presents a fourth face - a high rocky plateau.

VEGETATION:

Vegetation ranges from very patchy and open to lush tundra meadows. The broken rock of glacial moraines supports a scanty cover of lichens, with mosses and cushion plants such as moss campion, purple saxifrage and mountain avens nestling in the low spots. Cushion plants can thrive in the harsh Arctic environment by creating their own micro-climate. The temperature within the dense mass of leaves is several degrees higher than the ambient temperature. The fragile-looking arctic poppy sends its cheery yellow flower up to 30 centimetres above even the most barren areas.

In the southern areas of Baffin Island, lush tundra vegetation is found. Arctic shrubs

Natural Region 26

such as dwarf birch, willow, heather, and blueberry and their berry-bearing kin form a continuous colourful carpet in sheltered valleys. On less favourable areas, tundra covered by tussocks of grasses and sedges makes for one of the most difficult walking surfaces known.

WILDLIFE:

Although most of this region is ice and rock, several highly productive land and marine areas exist. The lush tundra supports land mammals such as arctic hare, lemming, wolf, arctic fox, red fox and caribou.



Mt. Asgard

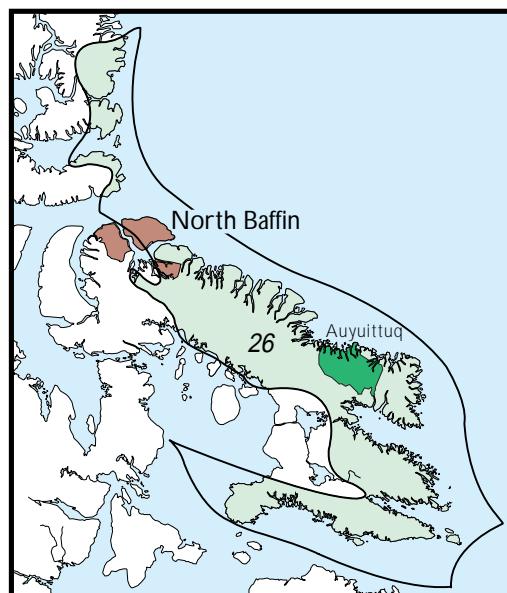
Polar bear, walrus, beluga, narwhal and several species of seal (ringed, bearded, hooded) are common in the offshore waters. The waters of Lancaster Sound, off the north tip of Baffin Island, are unusually productive, harbouring large populations of many species of marine mammals and seabirds.

The cliffs of Bylot Island north of Baffin Island and the Hall Peninsula at its southern tip support huge rookeries of northern fulmars, thick-billed murres, black-legged kittiwakes and other seabirds. The largest northern fulmar colony known, containing between 200 000 and 500 000 birds, is found on Cape Searle on the east coast of Baffin Island. Two Migratory Bird Sanctuaries, Bylot Island and Cape Dorset, protect seabird colonies.

STATUS OF NATIONAL PARKS:

Auyuittuq - "the land that never melts" - National Park Reserve (19,707km²) is a rugged wilderness park. Actually, each summer the land does melt - but only at its edges. Water pours from the snouts of glaciers, and a few inches of soil above the permafrost turns into a slurry of mud and gravel. The massive Penny Ice Cap takes up much of the park interior, spawning glaciers that are still actively shaping the land. The glacier-carved peaks and the Akshayuk Pass hiking route attract adventurers from around the world. Auyuittuq includes a large marine component encompassing the fjords along the northern portion of the park.

Under the Nunavut Land Claims Agreement, signed in 1993, Government and Inuit are negotiating an Inuit Impact and Benefits Agreement to formally establish Auyuittuq National Park Reserve as a national park. These negotiations are expected to be concluded in 1997.





Polar bears



Tundra, Churchill area

THE LAND:

The entire region is a vast sodden plain that slopes gently toward the sea at a gradient of less than a metre per kilometre. Up to 85 percent of the region is muskeg or peat-forming wetlands. Such a huge expanse

...Though only at the distance of two miles, so low and flat was the land, that it appeared ten miles off, and scarcely a tree was to be seen....

*The words of R.M. Ballantyne,
a clerk with the Hudson Bay
Company, upon sighting
this region.*

of peat occurs nowhere else in North America and in only a few places in the world.

This is a land more of water than earth. Water lies everywhere - shallow oblong lakes, rivers that meander endlessly, streams running nowhere, bogs and fens; up to 50 percent of the surface is covered by water. Water in the form of permafrost underlies much of the region, resulting in landforms such as patterned ground, string bogs and palsas (mounds of frozen peat). In summer, walking is torture. Possibly nowhere else on earth are biting and sucking insects more abundant.

VEGETATION:

Approaching from sea as the first Europeans did, one sees a treeless land. Out-

side of alpine areas this is one of the most southerly expanses of tundra in the world. Separating the treeless tundra from the boreal forest is a mosaic of forest and tundra. Farther inland, dense forests of white spruce, balsam fir, aspen, balsam poplar and white birch occur on well-drained riverbanks and lake shores. Black spruce and tamarack spread over vast expanses of poorly drained muskeg.



Willow Ptarmigan

WILDLIFE:

The region is famous for its polar bears. A unique characteristic of this most southerly population of polar bears is that they construct summer dens to cool off in. Some are more than six metres deep and have probably been used for centuries. Caribou concentrate along the coastline in summer and winter inland among the boreal forests. In summer the coast of this region is alive with birds. Lesser snow geese, small Canada geese, brant, tundra swans, oldsquaw, king eider, northern phalarope and a host of shorebirds nest here.

STATUS OF NATIONAL PARKS:

A federal-provincial agreement establishing **Wapusk National Park** was signed in Churchill on April 24th, 1996 in the presence of the Prince of Wales, whose namesake fort is nearby. Parks Canada, Manitoba, the Local Government District of Churchill and Manitoba Keewatinowi Okimakanak (representing the northern Manitoba First Nations of Fox Lake and York Factory) worked together to achieve this agreement. Wapusk National Park, at 11,475 km², is the largest national park situated entirely in the provinces. Wapusk is the Cree name for white bear.

The national park includes one of the largest known polar bear denning sites in the world and is one of the most accessible places known to view polar bears. The Hudson Bay coastline provides critical waterfowl and shorebird nesting and feeding habitat.



Attawapiskat River

Natural Region 27

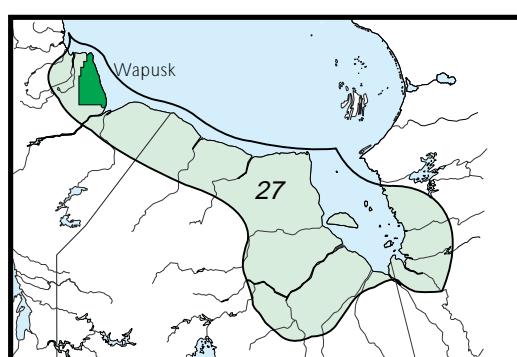


James Bay Lowlands

In addition, the area includes most of the natural resource features typical of the larger natural region, including: low-lying landscape with little relief; extensive muskeg; beach ridges; glacial features such as eskers; permafrost; and low arctic and subarctic vegetation.

Not only does the proposed national park offer superlative wildlife viewing, but visi-

tors to the area can also enjoy significant cultural resources. Four sites of national historic significance are located in the vicinity, including York Factory, for nearly three centuries the Hudson's Bay Company's principal fur trade centre, and the ruins of Fort Prince of Wales, a massive stone fortification built by the Hudson's Bay Company in the 1700s.





Southampton Plain

Not represented

28



Southampton Island

THE LAND:

This relatively small natural region includes part of Southampton Island, two other large islands and several smaller islands in the northern part of Hudson Bay. The combination of limestone and dolomite bedrock and dwarf arctic shrub vegetation makes this region distinct. The coastal plain is low lying with many small lakes, marshes, wet meadows and broad tidal flats. Raised beaches, evidence of higher sea levels in the past and the rebounding of the land after being released from the weight of the glaciers, parallel the coast. Much of this region was flooded after the retreat of the glaciers, effectively obliterating glacial landforms except for a few scattered eskers. Inland are large limestone plateaux covered by frost-shattered rock where little life is found.

VEGETATION:

The barrens here are truly barren; large areas support only scattered clumps of the shrub dryas, its white blossoms brighten-

BY THE BAY OF GOD'S MERCY

The world is transformed, within a week or two, from a silent expanse to a place of amazing activity and noise. Everywhere the sounds of mating birds mingle with the cracking of ice along the shore, the roar of swelling streams and the laughter of Eskimo children... Lemmings ... bask in the sun ... butterflies wander about, the green grass shoots up, the willow catkins expand and droop....

*George Sutton,
naturalist and explorer,
1924, describing June on
Southampton Island*



Coats Island

ing the shattered limestone that covers the ground. Much of the coast is devoid of vegetation. However, comparatively lush wet meadows of sedges and willows and rich tidal marshes occur where rivers enter the sea. Large grassy meadows also occur in the interior. In sheltered areas along river valleys, willows, the only "tree" occurring in this region, may reach two metres in height.

Natural Region 28

WILDLIFE:

Most of the mammals living here - arctic hare, lemmings, short-tailed weasel, arctic fox, polar bear and caribou - are species characteristic of the Arctic. Caribou and wolves were killed off on Southampton Island in the 1950s. However, caribou have been reintroduced and are thriving.



Walrus

The large walrus population which frequent the surrounding marine waters find important haul out grounds throughout the region. Shorebirds and waterfowl are abundant along the wet coastal meadows and tidal flats. Some of Canada's largest colonies of snow geese and Canada geese, along with the rare Ross's goose, nest in the rich sedge meadows of the Boas River Delta. Southampton Island is home to a nesting area of over 300,000 snow geese. Large colonies of thick-billed murres are found on Coats Island, one of the large offshore islands in Hudson Bay.

STATUS OF NATIONAL PARKS:

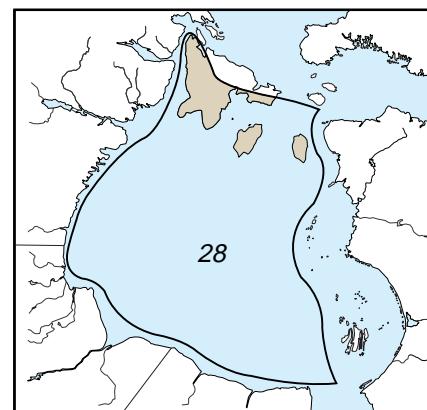
No national park has been established yet in this region. A study completed in 1981 identified several possible areas for consideration. However, following negotiation of Inuit land selections under the Nunavut land claim, large portions of all of those areas became Inuit land. Further studies might identify alternative areas but to be truly representative, a national park in this region would need a reasonable amount of coast line, most of which is Inuit settlement land.

Any national park established here would have to take into consideration the fact that hunting, trapping and fishing, the tra-

ditional land uses of the Arctic, are still carried on in this region. Seals, walrus, beluga, polar bear and caribou are the main species hunted; trapping for arctic fox provides income for many residents.

Parks Canada is watching with interest discussions between the Canadian Wildlife Service and local people about the creation of a national wildlife area on Coats Island, one of the primary representative areas identified in Parks Canada's 1981 study.

Establishment of a national park in this natural region would require the support and co-operation of the residents of Coral Harbour, Nunavut Tunngavik Inc., the Kivalliq Inuit Association and the Government of the Northwest Territories.



The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	requires updating
Potential Park Area Selected:	0
Park Feasibility Assessed:	0
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



St. Lawrence Lowlands

Represented by: Bruce Peninsula National Park and the terrestrial component of adjacent Fathom Five National Marine Park; Point Pelee National Park; Mingan Archipelago National Park Reserve; and a small portion of Gros Morne National Park.

29



Monarch Butterfly, Point Pelee National Park

THE LAND:

This natural region comprises three widely separated units linked by the unfolded sedimentary bedrock that underlies them. Although each unit shares a common geological origin, the geographical distances between them and the disparity in intensity of land use and population density produces a lack of uniformity with respect to flora and fauna and the impact of human activities on the land. The western and central units are among the most human-altered regions of Canada, containing about half the population of Canada; the eastern unit is largely unsettled.

The Niagara Escarpment, a line of cliffs and bluffs up to 300 metres high snaking across the entire western unit from Georgian Bay to the Niagara River, is the most prominent landform in a region of gentle unspectacular relief. The Niagara River cuts through the escarpment at Niagara Falls, one of the most outstanding examples of a falls and gorge in Canada, and certainly the most photographed.

CANADA'S DEEP SOUTH

"At Arnall's Creek they found a flat marsh-grass quite free from forest trees which were then universal above the water's edge of Lake Ontario. Here they pitched their tents, the creek and lake forming two sides of a triangle for defence from wolves... Salmon would run in November, and the winter supply of fish secured from the creek...."

From an account of the first settlers where Toronto now stands



Flowerpot Island

The story of the most recent glaciation is written heavily on the region. Large drumlin fields, boulder-studded moraines and thick deposits of glacial till (such as the Scarborough Bluffs near Toronto) dominate the topography of the region.

VEGETATION AND WILDLIFE:

Of all the natural regions in Canada, this region encompasses the greatest biodivers-

Natural Region 29

ity. Five biogeographic zones are found in this region: Carolinian forest, deciduous forest and mixed wood forest in the western and central units; mid-boreal and high-boreal forests in the eastern unit.

The Carolinian zone, restricted in Canada to the western unit of Region 29, is characterized by flora and fauna whose ranges extend far to the south. The most diverse flora and fauna in Canada are found here.

Although the vegetation is typified by a broadleaf forest of sugar maple, American beech, basswood, white oak, red oak, shagbark hickory, black walnut and butternut, farm fields and man-altered sites are the norm today. Wildlife that thrives in this zone today must be able to take advantage of agricultural crops and suburban habitats. Many common species, such as white-tailed deer, grey squirrel, coyote, starling, house sparrow and ringbilled gull, are recent arrivals to this region. Reptiles include several endangered species (eastern spiny soft-shelled turtle, Blanding's turtle, box turtle, and fox snake, among others) and eastern Canada's only lizard, the five-lined skink.



Cape May Warbler

ing slopes. White pine, red pine and red oak dominate the dry ridge tops. In the mixed wood forest zone, undisturbed sites consist of sugar maple, yellow birch, eastern hemlock and white pine. Boreal species such as white spruce, black spruce and balsam fir dominate in cool, damp habitats. Moose, wolf, snowshoe hare, mar-

tin, spruce grouse and other boreal species intermix with species more typical of southern areas such as the cardinal, white-tailed deer and raccoon.



Wood Duck

The eastern unit is characterized by boreal forests of black spruce, jack pine, balsam fir and white birch. Wildlife is boreal: wolf, caribou, lynx, martin, spruce

grouse, snowshoe hare. Thousands of snow geese congregate on the tidal flats of Cap Tourmente National Wildlife Area on the shore of the St. Lawrence Estuary during migration.

STATUS OF NATIONAL PARKS:

Three national parks and one national park reserve represent this region. **Point Pelee National Park** (15 km^2), a Ramsar site (wetland of international significance), is renowned as Canada's finest bird-watching site. A sandspit at the southernmost tip of Canada's mainland, Point Pelee is a unique blend of marsh, forest, fields and beach, which combined with its southern extension into Lake Erie, attracts thousands of birds and monarch butterflies on their biannual migrations. The forests of Point Pelee are jungle-like in appearance and harbour an unusually large variety of trees typical of the Carolinian zone. Point Pelee was established in 1918 from Naval Reserve lands after resolutions were submitted to the federal government recommending the preservation of Point Pelee as a wildlife sanctuary.



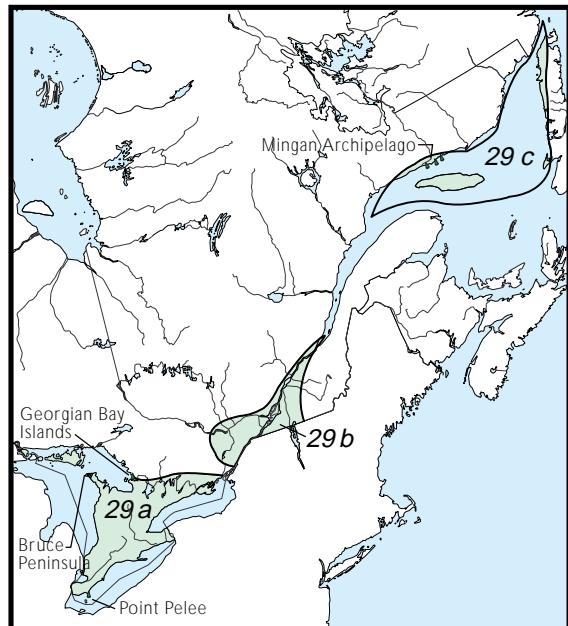
Niapiskau Island, Mingan Archipelago National Park Reserve

Bruce Peninsula National Park is the subject of a 1987 federal-provincial agreement with the Government of Ontario that involved the transfer of Cypress Lake Provincial Park and the acquisition of private lands on a “willing buyer-willing seller” basis. The area is a spectacular yet fragile land of rare orchids, limestone cliffs, ancient forest and intricate underground drainage. The popular Bruce Trail hugs the edge of the Niagara Escarpment as it passes through the park to its northern terminus in Tobermory. Together, Bruce Peninsula National Park and Fathom Five National Marine Park form the Core Area of the Niagara Escarpment World Biosphere Reserve. This park will be proclaimed under the National Parks Act once all lands within the park boundary are formally transferred to the Crown, and any outstanding land claims are settled. Since 1994 the park has acquired approximately 2,000 acres from private land holdings.

Fathom Five National Marine Park is Canada’s first marine park - a diver’s mecca where transparent waters and more than 20 shipwrecks beckon intrepid divers. The park consists of the water and 20 islands at the tip of the Bruce Peninsula, and these islands add to the representation of this natural region. Flowerpot Island, the most famous of these islands, (formerly part of Georgian

Bay Islands National Park), is named for unusual “flowerpot” rock formations, the result of receding water levels and constant wave action which have eroded the soft limestone bedrock. Similar to the situation with Bruce Peninsula National Park, there are still some private landholdings within the park boundaries that will be acquired on a “willing seller-willing buyer” basis before it will be proclaimed under legislation.

Oddly shaped rock pillars sculpted by wind and sea create the unique island-scape of **Mingan Archipelago National Park Reserve** (151 km²). Puffins and other seabirds nest on these limestone islands in the Gulf of St. Lawrence, while porpoises, seals and whales feed in the fertile waters offshore. Mingan was set aside as a national park reserve in 1984, pending the resolution of the comprehensive land claims of the Atikamekw and the Montagnais.





A STRIKING CONTRAST OF COAST AND MOUNTAINS

From the brilliant red-hued jutting cliffs of the Gaspé to the sombre, barren peaks of the Shickshock Mountains, this region, long renowned for its scenery, has been shaped by glaciers, by the unceasing gnawing of the sea and, most recently, by the hand of man.



Forillon National Park

THE LAND:

The ancient Appalachian Mountains form the backbone of this region. These worn, plateau-like flat-topped mountains, many with summits over 900 metres, compose the most spectacular, accessible mountain scenery in Canada east of the Rockies. The peaks are barren and covered with broken



Herring Gull

shale. Mount Jacques Cartier is the highest, at 1320 metres. Rivers have cut deep gorges through these ranges, widened during the most recent glaciation into magnificent U-shaped valleys. At the tip of the Gaspé Peninsula, the mountains meet the

sea in a series of spectacular multi-hued cliffs and plunging headlands.

VEGETATION:

Highly variable, the vegetation of this region includes isolated populations of species normally expected far to the north and south. The highest peaks and exposed cliffs provide habitat for several arctic-alpine species normally found thousands of kilometres away in the Rockies or the Arctic - relics from a time when arctic conditions were prevalent throughout this region.

In the central chain of mountains, high elevations and strong maritime influences combine to produce a forest dominated by conifers. White spruce, balsam fir and black spruce, with an understory of feather moss, form a continuous cover except on the higher, more exposed peaks, where rock barrens and krummholtz (thickets of stunted twisted spruce and fir) occur. In the river valleys and at lower elevations, the vegetation has a southern flavour. Sugar maple, white pine and eastern hemlock form a rich mixedwood forest. Dry sites are char-

Natural Region 30

acterized by red oak, red pine and white pine; wet sites by red maple, black ash and eastern white cedar.

WILDLIFE:

"In the Gaspé the hunter does not lack as often game as shot and powder."

This statement from a late nineteenth-century tourist brochure gives an indication of the past wealth of wildlife in this area. Like the vegetation the wildlife shows marked influences from both north and south. Car-



Cap Bon Ami, Forillon National Park

ibou, which once flourished throughout the central mountains, have been gone for over a century except for an isolated herd in Gaspesie Provincial Park. The wolf and wolverine have also disappeared from the region. Species such as moose, black bear, red fox, lynx, snowshoe hare and others that thrive in boreal forests followed the retreat of the glaciers. Others, such as white-tailed deer, coyotes and groundhogs, moved into the region after settlers had cleared the land for farms and towns.

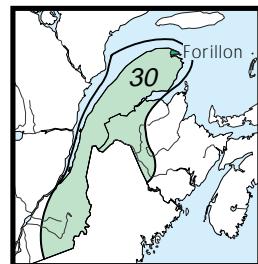
The red-walled cliffs and islets are home to thousands of sea and coastal birds. Bonaventure Island, one of many Migratory Bird Sanctuaries found in this region, supports a colony of gannets, common murres and a

few puffins. Gulls, black guillemots, razorbills, double-crested cormorants and black-legged kittiwakes nest on narrow ledges and atop cliffs. Along the south shore of the St. Lawrence flocks of migrating waterfowl congregate on the tidal flats.

STATUS OF NATIONAL PARKS:

Forillon National Park (240 km²) represents the Notre Dame Mountains and the boreal forest and coastal zone elements of this region. It includes a 160-metre-wide marine component extending along the coast. The park is noted for its abundance of marine mammals and birds. Double-crested cormorants, black guillemots, black-legged kittiwakes and razorbills nest on the coastal cliffs. Atlantic puffins, Leach's petrels and common murres feed in the fertile waters offshore. Harbour and grey seals regularly haul out on shoals and rocky points, while many species of whales - harbour porpoises, pilot whales, minke, sei, finback and humpback - are often seen from shore.

The richness of the sea has always been linked to man's presence here. The first European explorers found Micmac and Iroquois who had travelled here in summer to fish. In the eighteenth century, fishing villages based on the export of dried cod to Europe and the Caribbean were established along the coast. The traditional lifestyle of the cod fishermen of this region is a major focus of the park's interpretation program. Forillon was established in 1970 pursuant to a federal-provincial agreement with the Government of Quebec.





Pilot Whales off, Cape Breton Highlands National Park

THE LAND:

A rolling plateau, a remnant of the ancient Caledonia Highlands, distinguishes this region. Averaging more than 300 metres above sea level, the plateau is cut by deep valleys and cascading rivers.

Scoured by the giant tides of the Bay of Fundy and pounded by Atlantic swells, this region meets the sea with drama and conflict. The Fundy shore alternates between tide-scoured cliffs of sedimentary rock and extensive mud flats and salt marshes. Around Cape Breton Island, the land abruptly ends in a series of bold headlands and steep-sided river valleys pouring into coves and inlets.

VEGETATION:

A narrow coastal strip 3-30 kilometres wide, backed by steeply rising uplands, supports a forest dominated by red spruce on the New Brunswick side of the Bay and by white spruce on the Nova Scotia shore. Inland,

TIDES AND TRAILS

On the coast, a water world where fog often shrouds the shore and the mist hangs cold and damp from the sharp-pointed spruce; inland, a tranquil world of sun-dappled forests, hidden waterfalls, secluded glens and eternal barrens.

shady forests of white and yellow birch, American beech and sugar maple, carpeted with a lush understory of ferns, provide a restful contrast to the dense, damp evergreen forests. Hemlock, red maple, white birch, red spruce and white pine are found at lower elevations. In the Cape Breton Island portion of the region, extensive "barrens," waist-high with Labrador tea and broken by pink granite outcroppings and patches of light green lichens, cover the upland plateau. Almost the entire region has been logged, some of it several times.



Alma Marsh, Fundy National Park

Natural Region 31

WILDLIFE:

Large mammals found in this region include white-tailed deer, moose, red fox, black bear, raccoon, bobcat, coyote, mink, otter, muskrat and beaver. Wolf and caribou once roamed this region, but disappeared early in the twentieth century.



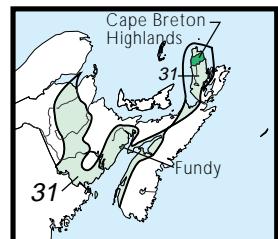
Atlantic Puffins

The salt marshes and tidal mud flats provide critical feeding and staging areas for myriads of shorebirds and waterfowl. Millions of semi-palmated sandpipers blacken beaches and mud flats in late summer to "re-fuel" for the long non-stop flight to South America. The Tantramarre marshes at the head of the Bay of Fundy are renowned for the vast numbers of waterfowl, particularly Canada geese, that gather here to feed in the rich salt marshes. The term "tantramarre" may be derived from an Acadian word referring to the racket made by the birds. Much of the extensive salt marshes have long been diked, drained and transformed into hay fields.

STATUS OF NATIONAL PARKS:

Two national parks represent this region, **Cape Breton Highlands** (951 km²) and **Fundy** (206 km²), established by federal-provincial agreements in 1936 and 1948 respectively. Fundy has two faces: the coast where tides alternately expose and submerge a damp ribbon of mudflats, salt marshes and

tidal pools - an area not part of the land yet not entirely belonging to the sea; and the inland face, the Fundy of shady forests and tumbling streams. This park is characteristic of the rugged Bay of Fundy coast and the Caledonia Highlands of southern New Brunswick. The park has a long history of human use; most of it has been logged in the past, and many old fields remain from small farms. The pine martin, considered rare in Canada, and a breeding population of peregrine falcons, an endangered species, have been reintroduced into the park.



The scenic Cabot Trail, the best-known feature of Cape Breton Highlands National Park, hugs the coast, providing breathtaking views of the restless Gulf of St. Lawrence. Trails lead through a variety of habitats typical of this natural region - from lush hardwood forests carpeted with ferns, through boreal forests of spruce and fir and bogs dotted with orchids, to sub-arctic barrens and muskeg. The rock vole, Gaspé shrew, pygmy shrew and pine martin, all considered rare in Canada, occur in the park.



Herring weir

32

Maritime Plain

Represented by: Prince Edward Island and
Kouchibouguac National Parks



SAND DUNES AND TEEMING ESTUARIES

Salt marshes rimmed by placid lagoons and endless ribbons of sun-swept sand beaches blend into dark forests and tidy farmlands. Canada's warmest ocean waters and longest beaches make this region a magnet for vacationers. "The finest land one can see, and full of beautiful trees and meadows...", wrote Jacques Cartier in 1534 upon landing on Prince Edward Island.



Prince Edward Island National Park

THE LAND:

This is a gentle land. The surface slopes gently toward the sea, riding on horizontal strata of red sandstone, shale, conglomerates and mudstones. Where land meets sea are dune-edged beaches, salt marshes and warm lagoons. Offshore, a constantly shifting chain of barrier islands and reefs protects the shore from the fury of storms sweeping in from the Gulf of St. Lawrence.

VEGETATION:

...the trees are wonderfully beautiful and fragrant ... we discovered there were cedars, yew-trees, pines, white elms, ash trees, willows and others....

Jacques Cartier, 1534

Very little of this region's original forest remains. The huge white pines described by Cartier and other explorers were largely gone by the end of the eighteenth century, cut down for masts for sailing ships. The original mixed wood forest of sugar maple,

American beech, American elm, black ash, yellow birch, white pine and eastern hemlock has long been cleared for farms. Repeated logging, fires, insect epidemics and hurricanes have left only remnants of the original forest. Today, white spruce, black spruce, balsam fir and tamarack predominate. Large areas of muck and peat soils are present. Extensive salt marshes fringe the shore. The barrier islands and dunes are sparsely vegetated. Marram grass is the only plant that can initially colonize the dunes, stabilizing the shifting sands and enabling other species to become established.



Kouchibouguac National Park

Natural Region 32



Kouchibouguac National Park

WILDLIFE:

The extensive beaches and sand-dune systems provide critical nesting habitat for the piping plover, an endangered species. Common terns nest on the barrier islands. The lagoons, beaches and salt marshes are frequented by many species of ducks and shorebirds. Great blue herons stalk the salt marshes and shorelines.

Common mammals include white-tailed deer, snowshoe hare, black bear, porcupine and red fox. Moose are scarce. Grey seals and harbour seals frequent the lagoons and estuaries. As most of the region has been logged or farmed, species dependent on mature forests, such as wolf, caribou, martin and fisher, have disappeared. Coyotes have recently arrived, a new predator in the region.

Many of this region's rivers have runs of Atlantic salmon. The most famous is the Miramichi, one of the richest Atlantic salmon rivers in eastern North America. But pollution from pulp and paper mills and mines threatens to reduce the run.

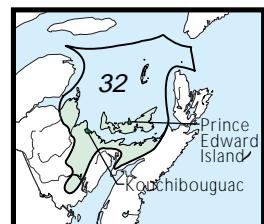
STATUS OF NATIONAL PARKS:

Two national parks represent this natural region. At **Kouchibouguac National Park** (239 km^2), established by a federal-provin-

cial agreement in 1979 with the Government of New Brunswick, salt marshes rimmed by placid lagoons and sand dunes of the offshore barrier islands gently blend into evergreen forests concealing bogs and cedar swamps. Piping plovers, an endangered species, and common terns nest on the beaches and barrier islands. Striped bass spawn in the estuaries. Much of the park has been logged and farmed in the past, and accordingly much of the forest is in an early successional stage. Several rivers gently flowing across the park inspired its Micmac name - "River of the long tides".

Sand dunes, red sandstone cliffs and endless sand beaches characterize **Prince Edward Island National Park** (22 km^2). Established in 1937 by federal legislation, the park is a dynamic system of shifting sand carried by wind and waves. Ponds and marshes develop inland of sand spits and provide habitat for the many birds that nest here, including the endangered piping plover. Perhaps the best-known feature of the park is Green Gables House, made famous internationally through Lucy Maud Montgomery's classic novel Anne of Green Gables.

In September, 1996 the governments of Canada and Prince Edward Island signed a Memorandum of understandomg committing the two governments to work together on adding the Greenwich Dunes to the National Park. The Greenwich Dunes would add to the park a parabolic dune system not found elsewhere in eastern North America.



33

Atlantic Coast Plain

Represented by: Kejimkujik National Park



GENTLE WATERS, LUSH FORESTS AND A POSTCARD COAST

A rugged yet gentle land of boulder-strewn barrens, tranquil forests, softly flowing rivers and shallow rock-studded lakes, framed by a rock-girded sea coast of world-renowned beauty.



Mersey River, Kejimkujik National Park

THE LAND:

From the coast, the land gradually rises to a height of about 200 metres in a series of irregular waves of folded metamorphic rock. The Ice Age has left its footprints on much of the region, scraping away the fertility of the land and depositing it in the sea where today it nurtures rich fisheries. Coarse, stony, shallow soils, exposed bedrock polished and grooved by the crawling glaciers, and erratics strewn about like glacier-scats are the legacy left by the Ice Age. Rivers

and streams and thousands of shallow, rocky lakes are found throughout the region.

VEGETATION:

Along a band of coastline 3-30 kilometres wide are dense, stunted forests of balsam fir, black spruce and white spruce. The growth of trees along the coast is slow because of the marginal soil, harsh climate and salt spray. White spruce, which are salt-tolerant, dominate along the most exposed areas. Large areas of bare rock, bogs and barrens have resulted from repeated fires. Isolated stands of old-growth hemlock forest are found throughout the region. Inland, mixed wood forests of red spruce, white pine, red oak and red maple are typical on well-drained sites. Although the combination of soil and climate is more conducive to growing trees here than it is along the coast, large barren areas and areas covered by low shrubs are still found. Fire and wind



Kejimkujik National Park

strongly influence the appearance of the vegetation in this region.

WILDLIFE:

Common large mammals include moose, white-tailed deer, black bear, snowshoe hare, red fox, porcupine, beaver, raccoon, martin and fisher. Before the turn of the century, caribou were plentiful throughout the region. But the combination of fires, agriculture, logging and settlement changed the region to a patchwork of forests, barrens and human habitations - ideal for moose and white-tailed deer but not for caribou.

Salt marshes and tidal mud flats provide ideal feeding and resting habitat for migrating waterfowl and shorebirds. The offshore frieze of islands and the indented coastline provide a rich habitat for gulls, cormorants, terns, guillemots and other coastal birds. The numerous lakes and streams are famous for speckled trout and runs of Atlantic salmon. "The angler may obtain such sport as he perhaps never dreamed of", an eighteenth century guide to Nova Scotia said of fishing in this region.

STATUS OF NATIONAL PARKS:

The inland portion of this region is represented by **Kejimkujik National Park** (382 km^2), established pursuant to a federal-provincial agreement with the Government



Common Merganser

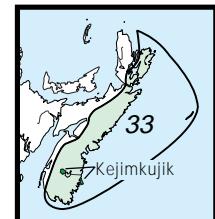
of Nova Scotia in 1967. The island-studded lakes and smooth-flowing rivers of this park are linked by a network of canoe trails used for thousands of years by the Micmac Indians. Hiking trails wind through rounded hills and shady forests where groves of 300-year-old hemlock trees can still be found. Several outstanding petroglyph sites depict elements of Micmac and European culture.

The coastal elements of this natural region are represented by the Kejimkujik's coastal adjunct (22 km^2) near **Port Mouton**. Pursuant to a federal-provincial agreement with the Government of Nova Scotia, this area was added to the park in 1988. One of the least-disturbed shoreline areas on the south



Black Guillemots

coast of Nova Scotia, the Port Mouton lands feature extensive brackish ponds and broad tidal flats. The endangered piping plover nests on the beaches of this peninsula. Dense scrub, century-old spruce-fir forests and barren uplands provide a backdrop to the shoreline.





Western Brook Pond, Gros Morne National Park

IN THE LAND OF TUCKAMOOR

The numberless waterfalls and cascades will cause surprise to those who ... believe Newfoundland to be a flat land of bogs and rocks.... People have not the slightest idea of what wonderful scenery is hidden away ... only waiting to be discovered.

*A.A. Radclyffe Dugmore,
1913 British Author
and Sportsman*



Bonne Bay, Gros Morne National Park

THE LAND:

Driving up the coast from the ferry terminal at Port Aux Basques, at the southern extremity of this natural region, the highway is squeezed between the clear green waters and white sand beaches of the Gulf of St. Lawrence and the looming, blue-shadowed Long Range Mountains. Spectacular fiords slash inland. The Long Range Mountains form the backbone of this region, sloping gently toward the Atlantic to the east, and dropping precipitously toward the west into the Gulf.

VEGETATION:

In the southern portion of the region, forests of balsam fir, with some black spruce and white spruce, are dominant. The trees are shrouded with lichens, giving the forest a frosted appearance. Beneath the trees a thick carpet of feather moss envelops fallen trees and rocks. In lowland areas, such

as around Grand Lake (Newfoundland's largest lake), trees grow to a fair size, and the timber obtained is of excellent quality. Mountain maples are abundant here, with white birch growing on burned-over sites. On exposed ridges, tuckamoor - tangled twisted thickets of stunted spruce and fir - form an impenetrable barrier. Extensive bogs and fens occur in low-lying areas. The northern part of the region is a transition from boreal forest to forest-tundra. Much of the land is covered by lichen-encrusted exposed rock. Fire has reduced much of the forest cover to scrublands dominated by alder, dwarf birch and Labrador tea.



Caribou

WILDLIFE:

Great numbers of caribou thrive in this region. Caribou trails crisscross the high ridges and upland areas and provide erratic pathways through the tuckamoor. The extensive patches of lichens (caribou moss) provide important feeding areas, and the high rolling plateaux of the Long Range Mountains are nurseries where the caribou bear their young.

"Owing to the nutritive qualities of its super-excellent caribou moss, the deer [caribou] grow to a great size and in some

respects throw out finer horns than any other form of the reindeer in existence.... Big bucks sometimes weigh as much as 500 pounds."

*J.G. Millais,
British sportsman and naturalist, 1900.*

Introduced to Newfoundland in 1878 and subsequently in 1904, moose are abundant. Marten and wolves have been extirpated from the region, but martin have been reintroduced in Gros Morne National Park. The coastal strip lies along the Atlantic Flyway and provides important stopover sites for migrating waterfowl and shorebirds, as well as feeding areas for seabirds.

STATUS OF NATIONAL PARKS:

This region is represented by Gros Morne National Park (1,805 km²). The Long Range Mountains, rising abruptly from the narrow coastal plain, dominate the park. The coastal plain is characterized by large raised bogs dotted with pitcher plants. The shoreline is extremely picturesque, varying from rocky headlands to broad sand beaches. Atop the Long Range Mountains is



Ten Mile Pond, Gros Morne National Park

Natural Region 34

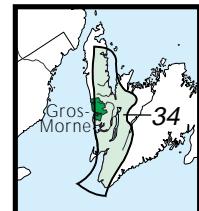


Gros Morne National Park, Serpentine Tableland

a vast alpine plateau of tundra, bogs and “tuckamoor”.

The park is internationally acclaimed for its unique geological features. In addition to boasting over 30 fossil sites, this is one of the few places on the globe where rocks from deep within the earth are exposed. The entire southwestern portion of the park contains rocks from the earth's mantle (the layer surrounding the earth's molten core)

and from the oceanic crust (the layer above the mantle). Much of the oceanic crustal material has eroded to expose the serpentine tableland, an unusual area of dark green rock which, because of its high magnesium content, stifles plant growth, creating a moonscape devoid of life. The geology of the park contributes greatly to the scientific community's knowledge and understanding of monumental earth-building and modifying forces called plate tectonics.



A 1973 federal-provincial agreement, amended in 1983, with the Government of Newfoundland and Labrador provides for the establishment of the park. Gros Morne has been named to the UNESCO List of World Heritage Sites in recognition of its outstanding example of major stages in the earth's evolutionary history, and its exceptional natural beauty.



Gros Morne National Park, Lomond River



Eastern Newfoundland Atlantic Region

Represented by: Terra Nova National Park

35



Razor Bills

BOREAL BY THE SEA

...the country in all directions ... appeared to be covered with one dense unbroken pine forest, with here and there a bold granitic pap projecting above the dark-green surface Wind-fallen trees, underwood, and brooks lay in our way, which, together with the suffocating heat in the woods, and mosquitoes, hindered us from advancing more than five miles on this day....

William Cormack, 1822
The only known European to walk across Newfoundland.



Terra Nova National Park

THE LAND:

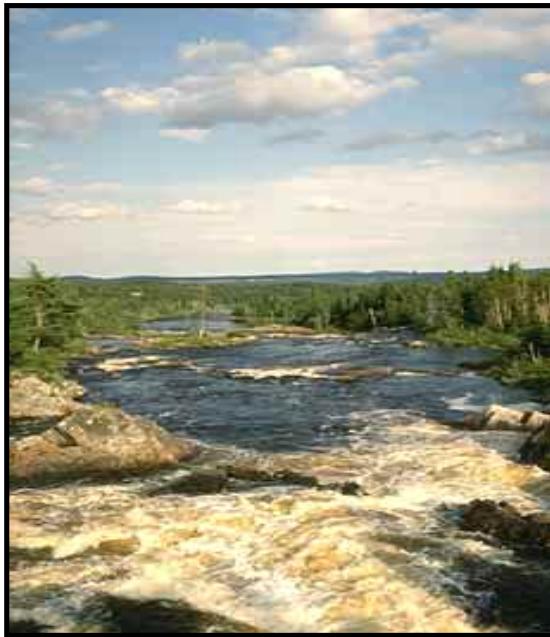
The eroded remains of the ancient Appalachian Mountains give this region a rugged, hilly countenance. Along the coast in many places, sea cliffs rise precipitously 200-300 metres. Inland are innumerable lakes and rocky, fast-flowing rivers. The wounds left

by the passing of the glaciers have not healed over much of the region. Large areas of exposed bedrock where the soil has been scraped away remain. Other areas are covered by glacial till. Lichen-encrusted erratic boulders perch on barren hilltops.

VEGETATION:

Natural Region 35

About one-half of the region is covered by a boreal forest of black spruce and balsam fir. Near the coast, an understory of feather-moss thrives in the moist sea air. Inland, nearly pure stands of balsam fir occur on well-drained sites. In the hilly country and along protected valleys the forest is very productive and supports a thriving pulp-and-paper industry. Much of the original forest has been altered by human-caused fires. Bogs cover much of the region.



Northwest River, Terra Nova National Park

WILDLIFE:

"One of the most striking features of the interior is the innumerable deer-paths on the savannas. They ... take directions as various as the winds, giving the whole country a chequered appearance. Of the millions of acres here, there is no one spot exceeding a few superficial yards that is not bounded on all sides by deer-paths...."

William Cormack, 1822



Although the Strait of Belle Isle separating Newfoundland from the mainland is only 18 kilometres across, it has proven to be an effective barrier to many species of wildlife. Only 14 species of mammals are native to Newfoundland, compared to 42 species on the adjacent mainland. Many species, such as the moose, snowshoe hare and red squirrel have been introduced and are now thriving. Some native species have only recently made the crossing. Lynx,

for example, were not mentioned until the turn of the century. Other native species include the black bear, red fox, beaver, mink and caribou. The wolf was once found here, but has been extirpated from the area. The caribou of Newfoundland are a unique sub-species and are the largest in North America.

Along the coastal cliffs and islands of this region are some of the largest seabird rookeries in North America. Cape St. Mary's and the Witless Bay Islands are two of the most accessible and spectacular seabird rookeries in the world. Hundreds of thousands of kittiwakes, puffins, gulls, common murres, razor-billed auks, gannets and millions of Leach's storm petrels breed at these sites. Important seabird colonies are protected as Migratory Bird Sanctuaries or Ecological Reserves. On visiting Funk Island in 1534, explorer Jacques Cartier extolled the abundance and fatness of the birds there. The flightless birds that Cartier was describing were great auks. They were hunted to extinction by 1844.



Terra Nova National Park

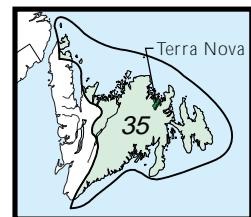
STATUS OF NATIONAL PARKS:

Terra Nova National Park (400 km²) was established pursuant to a federal-provincial agreement in 1957. With its jagged rocky shorelines backed by dense boreal forest, the park protects an outstanding example of this natural region. The fiords or "sounds" that indent the coast are the park's most distinctive feature. Icebergs and whales can often be seen from the headlands framing the fiords. The teeming waters of Bonavista Bay and Newman Sound have attracted fishermen for hundreds of years, and some of Newfoundland's oldest settlements were located in the park.

Inland are numberless bogs and lakes filling depressions gouged out by the passing of

glaciers during the Ice Age. Raised bogs, gentle domes rising about 1.5 metres above the surrounding terrain, are common. Sprouting from the sphagnum mosses and lichens are pitcher plants, their curious deep crimson flowers conspicuous among the mainly pastel colours of the vegetation. Other plants that thrive in the acidic conditions found in bogs include Labrador tea, leatherleaf, bog laurel and sundews. The forest is dominated by black spruce and balsam fir. Much of the forest was logged before the park was established.

The wildlife found in the park is typical of this region. Caribou, once common in this part of Newfoundland, are still occasionally spotted. Moose, introduced to Newfoundland in 1878 and 1904, thrive and are often seen grazing in the park along the Trans-Canada highway. The Newfoundland pine marten has recently been reintroduced in Terra Nova National Park. The Terra Nova River provides fine fishing for Atlantic salmon and speckled trout.



36 Western Arctic Lowlands

Represented by: Aulavik National Park



Muskoxen

DOMAIN OF THE MUSKOX

**“Here I stand
Surrounded with great joy,
For the spirit of the air,
Lets glorious food sink down to me,
Here I stand”**

*song recorded on Victoria Island
by the Fifth Thule Expedition, 1924*

THE LAND:

Low-lying, barren islands in the southwest Arctic Archipelago distinguish this region. Victoria Island, the largest, is bigger than the four Atlantic provinces combined. The coastlines of these islands range from extensive lowlands to spectacular cliffs. Most of the area has been affected by the recent passage of the continental ice sheets. Fields of drumlins on southern Victoria Island impart a regular but complex “grain” that contrasts with the flat horizon of adjacent lowlands. Patches of undulating moraines, which appear from the air to be like gargantuan ploughed fields, break up vast plains where sinuous eskers provide the only vertical relief. Upland plateaux cut up into an Arctic version of badlands contrast with areas where nothing but broken limestone, sand and gravel are to be seen. Coal seams blacken the hills on Banks Island and loose chunks of coal are scattered on the beaches.

VEGETATION:

Most of this region is sparsely vegetated, with vast seemingly lifeless areas. Wet sites, however, have a heavy cover of sedges, cottongrass, mosses and saxifrages. In the southern fringes of the region, the thawed layer above the permafrost supports a thick layer of dwarf tundra shrubs. Dwarf birch, willow and alder can reach two metres in height. In windswept areas, trees - some as old as 400 years - grow horizontally, their branches twisted and convoluted and never rising more than a few centimetres above the soil.



Thomsen River, Banks Island

Natural Region 36

WILDLIFE:

In winter, this land appears to be almost empty of life. The summer cacophony of bird calls is gone. Of the large mammals, only musk-oxen and caribou remain, steadfast in the face of the fiercest Arctic blizzards.

Of the birds, only the raven, ptarmigan and a few snowy owls stay to face the cold and darkness. Beneath the snow, lemmings scurry along well-packed tunnels. But the surface of the land is still and silent. In summer the land comes alive under the benevolence of 24-hour sunshine. Caribou and musk-oxen get fat and bear their young in sheltered valleys. Flocks of snow geese and other waterfowl nest on the sedge meadows along river valleys.



Patterned ground, Banks Island

The core of this national park on northern Banks Island is formed by the relatively lush Thomsen River and its tributaries. The park also features deeply-cut river canyons and rugged, desert-like badlands. The hills and valleys surrounding the rivers support about one-

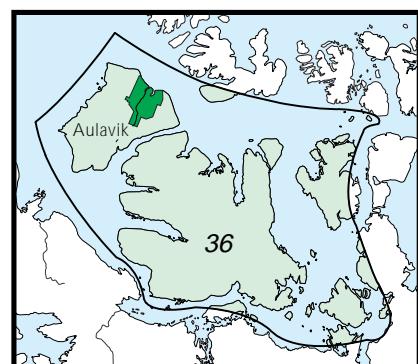
quarter of the muskox on Banks Island, and some of the highest concentrations of muskox in the world. Archaeological sites dating from 3,400 years ago are evidence of the area's rich cultural heritage.

The most popular visitor activities in the park are travel by canoe or raft down the Thomsen River, and hiking the vast expanses of tundra in the core of the park.

STATUS OF NATIONAL PARKS:

An agreement for the establishment of Aulavik National Park was signed in August 1992 at a ceremony in Sachs Harbour, the only community on Banks Island. The park agreement was signed by representatives of the Inuvialuit, the federal government, and the government of the Northwest Territories.

Aulavik National Park comprises some 12,200 km² of windswept tundra landscape - about twice the size of Prince Edward Island. The Inuvialuktun name was suggested by one of the elders of Sachs Harbour, and means "where people travel".



37 Eastern Arctic Lowlands

Not represented: Lands are reserved for a national park on northern Baffin and Bylot Islands



Seabird colony, Prince Leopold Island

GLORIOUS IT IS IN WINTER HERE!

And yet there is only
One great thing,
The only thing,
To live to see in huts and
on journeys
The great day that dawns
And the light that fills
the world.

Song recorded by the Fifth Thule Expedition, 1924



Hoodoo, Baffin Island

THE LAND:

In this region, sedimentary strata overlie Precambrian bedrock, resulting in low-lying plains and smooth plateaux, especially in the southern portions: “[the coast] is simply a ribbon of granite rising just above the high tide contour, at low water hemmed by

... a rocky tidal flat with a sprinkling of granite isles and reefs.... It was a desolate shore.... There seemed to be no elevations even 50 feet within a dozen miles of the coast.” These were the words of explorer George Putnam in 1928.

Tidal flats over 10 kilometres wide are festooned with “growlers” and ice floes, sculpted into mushroom-like shapes by tide-driven waters. The two largest lakes in the Arctic Islands, Nettilling and Anadjuak, lie in the middle of the lowlands of southwestern Baffin Island. Inland is a flat country of marshy plains interspersed with bare rock, ponds and lakes.

The northern portions of the region present a contrast to the horizontal coastline and sodden lowlands of the south. The land rises abruptly to a high plateau. Several spectacular fiords slash inland, with sheer cliffs rising over 1,000 metres.

The climate is bitterly cold, with overcast conditions prevailing much of the time. Precipitation is limited, creating desert conditions.

VEGETATION:

Vegetation is sparse, dwarfed and starved, particularly in the northern part of the region. Well-drained sites support a discontinuous cover of low-growing herbs and shrubs - sedges, saxifrages, willows, mountain avens and arctic poppy are typical. In the southern lowlands, wet meadows of sedges, cottongrass and moss cover large areas.

WILDLIFE:

Although parts of this region support little wildlife, some areas are especially prolific. Large numbers of caribou, wolf, arctic fox, wolverine, collared lemming and arctic hare are found in fertile areas of the land and sea. Polar bears use the coastal areas for winter denning and spring seal hunting.

The wet lowland meadows adjacent to Hudson Bay and Foxe Basin and the lake-studded coastal plain of western Baffin Island provide the most important habitat for waterfowl in the entire Arctic. The largest goose colony in the Arctic is found here, on the Koudjuak Plain. Over one million lesser snow geese, Canada geese and

brant nest and feed on the marshy sedge tundra of the plain in summer. King eider, common eider, oldsquaw and brant are the most abundant nesting species.



Oliver Sound

STATUS OF NATIONAL PARKS:

Under the Nunavut Land Claims Agreement, signed in 1993, Government and Inuit are negotiating an Inuit Impact and Benefits Agreement to formally establish a national park on Northern Baffin Island and Bylot Island - the North Baffin proposal. It is expected that these negotiations will be concluded in 1997. In the meantime, the lands have been protected for a future national park under the Territorial Lands Act.



King Eider

The scenery of the proposed park is impressive: sea cliffs over 300 metres, glaciers dropping into the sea, high mountains and some of the world's most spectacular fiords. The concentration of marine mammals and birds in the area is even more remarkable. Several huge cliff colonies of seabirds are found along the coast of Lancaster Sound and northern Baffin Island, including a colony of over 400,000 thick-billed murres, along with black-legged kittiwakes, arctic terns and northern fulmars. Bylot Island, within the national park

Natural Region 37

proposal, supports about 35 percent of the world's breeding population of greater snow geese. In the waters adjacent to the proposed national park area, narwhals, belugas, walrus, polar bear and five species of seal (harbour, hooded, bearded, harp and ringed) abound. The rare bowhead whale regularly frequents Lancaster Sound.

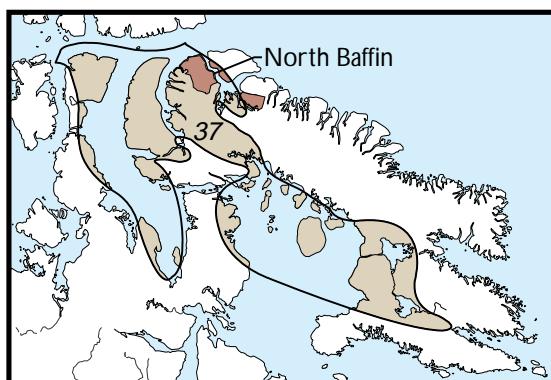
Given the spectacular combination of terrestrial and marine resources here, Parks Canada had initially presented local people with the idea of a large park combining both land and marine elements. This idea was rejected and consultations focussed on the land area only, with the idea that it may be appropriate in the future to reconsider an adjacent marine protected area.



Prince Leopold Island

The following table summarizes the status of system planning for each step toward establishing a new national park in this natural region.

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	done
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0





Western High Arctic

Not represented: Lands are reserved for a national park on northern Bathurst Island

38

ISLANDS IN A FROZEN SEA

The silence hangs so deep that time itself seems to stand still. Stand on a ridge like thousands of others on an island like dozens of others and in all directions there is only stillness and peace. Only the wind moves.



Peary Caribou

THE LAND:

This is a region of the sea - nowhere in this region of islands can you stand more than 50 kilometres from the sea. Yet despite its proximity to the water, most of this region is polar desert - a frigid, barren rock-strewn land. It is one of the driest regions in the world, receiving less than 11 centimetres of precipitation yearly. Snow may fall in any month, a dry powdery snow that blows like dust on the wind. It accumulates in ravines and valleys where it forms hardpacked drifts that have the consistency of Styrofoam.

Each island that makes up this region has its own character ranging from flat to rugged. The mountains on Melville Island, the lar-

gest, reach heights of one kilometre. In contrast, the southwest part of Bathurst Island is a remarkably flat sand and gravel plain.

The north magnetic pole is located in this region.

VEGETATION:

Much of this region has little or no vegetation. Where continuous vegetation occurs, it usually consists of hummocks of mosses, lichens, grasses and sedges. The only woody species, the dwarf willow, grows as a dense twisted mat crawling along the ground. Vast areas appear completely devoid of life from

Natural Region 38

a distance. But lichens and mosses cover the rocks; grasses grow around meltwater puddles, and the hilltops bare of snow are tinted with the warm living shades of red and brown.

WILDLIFE:

For a region sparse in plant life, it boasts a surprising number of animals; polar bear, Peary caribou, muskox, collared lemming, arctic wolf, arctic fox, arctic hare and ermine in small, discontinuous populations concentrated around wet lowlands. Life is tenuous in this region. An early snowfall that melts and then freezes, sealing vegetation beneath a layer of ice, can spell disaster.

Birds are more fortunate. They can fly away when times are rough. Snowy owls depend on lemmings as a food source. But lemming populations fluctuate on a four-year cycle. Luckily for the owls, each island is at a different phase of the cycle, meaning that they can simply fly off to another island where the hunting is good. The arctic foxes are not so lucky.

Birds abound here in summer, especially on the southern islands. The valleys and lowlands, bespeckled with meltwater ponds and puddles, provide nesting habitat for myriads of shorebirds and waterfowl: black-bellied plovers, knots, pectoral sandpipers, king eiders, greater snow geese, brant, old-squaw and red-throated loon, among others.

The only known nesting site of the ivory

gull is found in this region and is protected as Seymour Island Migratory Bird Sanctuary (8 km^2).

STATUS OF NATIONAL PARKS:

In 1995 the Inuit of Resolute Bay agreed to work with Parks Canada and other government departments to study the feasibility of a national park on northern Bathurst Island. In October, 1996 lands were reserved under the Territorial Land Act to provide interim protection pending consultations and negotiations.

The withdrawn area is about $5,700 \text{ km}^2$ in size and includes those areas of Bathurst Island lying adjacent to and north of the existing National Wildlife Area at Polar Bear Pass.

The proposed national park area represents all the major themes of this harsh natural region - in particular the long cold winters, expanses of exposed bedrock, and very short growing season. Vegetation is sparse and soils are very thin. There is



Arctic Fox



Polar Bear Pass National Wildlife Area,
Bathurst Island

Natural Region 38

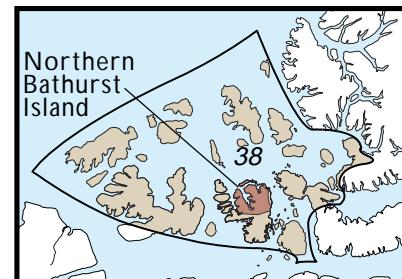
sufficient vegetation, however, to support small populations of muskox and Peary caribou. In fact, the most important calving area for Peary Caribou, an endangered species, is found within the park proposal. There are also several small, isolated archaeological sites.

Consultations with local residents, and studies of mineral and energy resources, cultural resources, tourism potential, and oral history have been initiated. It is expected that about two years will be required to complete these studies and consultations. natural region.

Establishment of a national park in this natural region requires the support and cooperation of Inuit and the Government of the Northwest Territories, including the negotiation of an Inuit Impact and Benefits Agreement.



Bjorne Peninsula



The following table summarizes the status of system planning for each step toward establishing a new national park in this

Steps in the Park Establishment Process	Status
Representative Natural Areas Identified:	done
Potential Park Area Selected:	done
Park Feasibility Assessed:	underway
Park Agreement Signed:	0
Scheduled under the National Parks Act :	0



Tanquary Fiord, Ellesmere Island National Park Reserve

TOP OF THE WORLD

This is as far away as you can get in Canada. Here is a land of desolation and splendour on a grand scale. But it is also a land of intimate, fragile beauty - of delicate arctic poppies vibrating in the breeze, of miniature forests of lichens and heather, of subtle pastel shades and heady aromas.

THE LAND:

Most of this region is desert - a lifeless frozen land. The Ice Age still holds sway over this land, and massive ice caps cloak much of this region. On Ellesmere Island, the ice cap is 2100 metres above sea level and hundreds of metres thick. The rugged peaks of the Innuitian Mountains, among the highest in Canada, pierce the ice. Like hands grop-

ing to touch, glaciers extend icy fingers toward fiords reaching inland.

Along Ellesmere Island's northern coast, ice shelves, permanent aprons of ice held fast to the shore for thousands of years, cover vast areas of the Arctic Ocean.

The climate is "damn" cold. Even in July, the largely ice-covered seas refrigerate the land. The region is dry, receiving about the same precipitation as the Sahara.



Signing ceremony, Ellesmere Island National Park Reserve

VEGETATION:

Although most of the region is ice and rock, there are a few areas, called Arctic thermal oases, that have remarkably high biological productivity for the latitude. Although they cover less than two percent of the land, they are of critical importance to all life in the region. During the brief summer of continuous 24-hour sunlight, these oases burst into bloom in a frantic rush to

complete life cycles before the onset of winter. In the most luxuriant oases, heathers and blueberries are found. More common are meadows of sedges and mosses, along with herbs that grow in dense cushions and mats. The entrances to animal dens, the ground around decomposed carcasses, old campsites and other "fertilized" spots stand out as having lusher, more colourful vegetation than the surrounding areas.

WILDLIFE:

This region has few species of animals. Land mammals include Peary caribou, muskox, wolf, arctic fox, ermine, arctic hare and collared lemming. Conspicuous land birds include the horned lark, hoary redpoll, snow bunting and willow ptarmigan.

Peary caribou are smaller and paler than barren-ground caribou. Unlike their mainland relatives, they do not undertake long seasonal migrations or travel in huge herds. They occur in small scattered groups, sometimes in the most seemingly inhospitable habitats. Severe winters in recent years have caused the number of Peary Caribou to drop alarmingly.

Analogous to the terrestrial oases, marine "oases" - areas of high productivity - harbour populations of marine mammals and birds. Polar bear, walrus, ringed and bearded seals, and narwhals congregate in certain areas such as Lancaster Sound. Several large seabird rookeries are located near these rich feeding sites. Thick-billed murres, black-legged kittiwakes, northern fulmars, black guillemots, Thayer's gulls and glaucous gulls are the most common species.

Snow geese, eiders, oldsquaw and a host of shorebirds nest on the grassy tundra. The arctic tern also nests here on the shores of lakes and along beaches. This champion migrator follows the sun of summer, never knowing a day of winter in its life.

STATUS OF NATIONAL PARKS:

Ellesmere Island National Park Reserve ($37,775 \text{ km}^2$), Canada's second largest national park, represents this natural region. A land of ice, it is dominated by hundreds of glaciers. Mount Barbeau (2,600 m), the highest mountain in eastern North America, towers over vast ice fields. The long bitterly cold winters, brief cool summers and low precipitation have created polar desert conditions throughout much of the park, with little vegetation or wildlife. However, lowland areas, such as the one surrounding Lake Hazen, the most northerly lake in Canada, are relatively lush. In these thermal oases, arctic hare often congregate in groups of hundreds. Small herds of muskox and Peary caribou, a few wolves, numerous arctic foxes and about 30 species of birds thrive in meadows of lush grasses and bright arctic flowers.

Hundreds of archaeological sites in the area tell of ancient Inuit peoples who passed



Lake Hazen

Natural Region 39

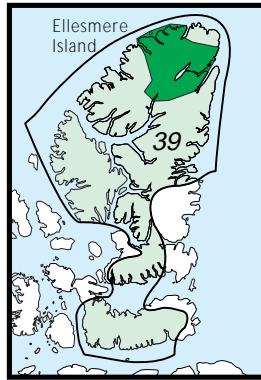


Ward Hunt Ice Shelf

this way 4,000 years ago. The remains of Fort Conger, a scientific research base established in 1881, is a site of historic significance. Wooden shacks built by the Arctic explorer Robert Peary, of North Pole fame, still stand on the site.

The agreement between the federal government and the Government of the Northwest Territories setting out the terms and conditions for establishing Ellesmere Island National Park Reserve was signed in 1986. The historic signing ceremony took place on a snowy September day on the shores of Tanquary Fiord. Flags snapped and a lone arctic hare hopped by as the

coldest park agreement signing ceremony in the history of national park establishment took place. Under the Nunavut Land Claims Agreement, signed in 1993, government and Inuit are negotiating an Inuit Impact and Benefits Agreement to formally establish northern Ellesmere Island as a national park of Canada. It is expected that these negotiations will be concluded in 1996.



CANADA'S NATIONAL PARKS AND NATIONAL PARK RESERVES (R)

National Park/Reserve (R)	Year of Agreement	Year Established	Park Area Sq.Km.
1) Banff, Alberta	–	1885	6,641.0
2) 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	–	1920	1,406.4
11) Wood Buffalo, Alberta, Northwest Terr.	–	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 I.	–	1937	21.5
17) Fundy, New Brunswick	–	1948	205.9
18) Terra-Nova, Newfoundland	–	1957	399.9
19) Kejimkujik, Nova Scotia	1967	1974	403.7
20) Kouchibouguac, New Brunswick	1969	1979	239.2
21) *Pacific Rim, British Columbia (R)	1970/87	–	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 Territory (R)	1972	1976	22,013.3
26) Nahanni, Northwest Territories (R)	1972	1976	4,765.2
27) Auyuittuq, Northwest Territories (R)	1972	1976	19,707.4
28) Gros Morne, Newfoundland	1970/73/78/83	–	1,805.0
29) Grasslands, Saskatchewan	1975/81/88	–	906.4
30) Mingan Archipelago, Quebec (R)	–	1984	150.7
31) Ivavik, Yukon Territory	1984	1984	10,168.4
32) Ellesmere Island, Northwest Terr. (R)	1986	1988	37,775.0
33) Bruce Peninsula, Ontario	1987	–	154.0
34) Gwaii Haanas, British Columbia (R)	1987/88	–	1,495.0
35) Aulavik, Northwest Territories	1992	–	12,200.0
36) Vuntut, Yukon Territory	1993	1995	4,345.0
37) Wapusk, Manitoba	1996	–	11,475.0
38) Tuktut Nogait, Northwest Territories	1996	–	16,340.0
			TOTAL 222,700.9

** Land withdrawn for future national parks	Year of Withdrawal	Area Sq. Km.
East Arm of Great Slave Lake, Northwest Terr.	1970	7,150.0
Northern Baffin Island, Northwest Territories	1992	22,252.0
Tuktut Nogait, N.W.T. (Inuit and Sahtu Sectors)	1995	11,860.0
Wager Bay, Northwest Territories	1996	23,600.0
Northern Bathurst Island, Northwest Territories.	1996	8,700.0

TOTAL 73,552.0

TOTALS 296,252.9

“Year of Agreement” refers to year of memorandum of understanding or federal/provincial agreement to establish a national park.

“Year established” refers to year park was formally created by Order-In-Council, proclamation, or enactment.

(R) National Park Reserve: A national park reserve is 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.

Park areas reflect park boundary revisions legislated by Bill C-30.

- * Park area measurement includes land component only.

- ** Lands related to the Guillaume-Delisle Lake (Que.) and Churn Creek (B.C.) proposed national parks have been protected by provincial jurisdictions, though not specifically to create national parks.