

Protected Areas

Abstract

Protected areas are composed of land, freshwater and marine areas set aside through legislation to protect representative examples of Canada's ecosystems. They are created and managed by the federal, provincial and territorial governments. A small but increasing number is also administered by Aboriginal governments and communities. Some protected areas are jointly managed by two or more administrations. While this map focuses on public and aboriginal protected areas, an increasing number of private lands are conserved by non-government organizations, such as the Nature Conservancy of Canada. Federal, provincial or territorial and Aboriginal protected areas are grouped separately on this map to show their distribution throughout Canada in 2007. This map shows only the 1385 protected areas which are 10 square kilometres or larger.

Federal Protected Areas

The federal government manages about 50 percent of the land in all of Canada's protected areas. Several laws have been created over the years to protect Canada's land and oceans. An Act on the Conservation of Natural Resources was passed in 1909 and established a commission that laid the foundation for important protected-areas legislation, including the National Parks Act, the Northwest Territories Game Act and the Migratory Birds Convention Act (1917). In 1919, the first migratory bird sanctuaries were created at Percé, Bonaventure Island and Birds Rock in the Gulf of St. Lawrence.

The Prairie Farm Rehabilitation Administration was established by an act of parliament in 1935 in response to the widespread drought, farm abandonment and land degradation of the 1930s. The Community Pasture Program was one means of solving the crisis. More than 30 community pastures were created between 1938 and 1940. Others were established over the years and they are still managed to ensure sustainable use of natural resources.

In 1947, the newly created Dominion Wildlife Service had the responsibility for 67 migratory bird sanctuaries. Migratory bird sanctuaries protect the migrating species, whereas national wildlife areas protect the habitat, a term used to describe the environment necessary in order for plant and animal species to carry out their life cycle.

The National Wildlife Policy and Program was created in 1966 to help protect the habitat of migratory birds. The Canada Wildlife Act of 1973 gave the Canadian Wildlife Service authority to purchase land to set aside as national wildlife areas, instead of leasing it. Habitat protection evolved to include landscapes other than

wetlands, for species other than the waterfowl population. The Canada Wildlife Act was amended in 1994 to allow the establishment of protected marine areas. Today Environment Canada's Canadian Wildlife Service manages 92 migratory bird sanctuaries covering 110 000 square kilometres and 51 national wildlife areas covering 5 290 square kilometres.

Banff National Park, established as Rocky Mountain National Park in 1885, was Canada's first national park and among the first in the world. The Dominion Parks Branch (now known as the Parks Canada Agency) was established in 1911, the world's first organization charged with the management of national parks. Over the years, parliament continued to add parks to the system. More than 20 national parks have been created since 1970. Contained in Canada's first National Parks Act, passed in 1930, were the words "Parks are hereby dedicated to the people of Canada for their benefit, education, and enjoyment... Such parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations."

Marine protected areas are managed by the federal government and some of the provinces. Since 1997, the Oceans Act has provided Fisheries and Oceans Canada with the ability to establish marine protected areas to protect and conserve important fish and marine mammal habitats, endangered marine species, unique features and areas of high biological productivity or biodiversity. Marine wildlife areas, migratory bird sanctuaries and national wildlife areas are established by Environment Canada to protect and conserve habitat for a variety of wildlife species, including migratory birds and endangered species. Parks Canada administers national marine conservation areas and a number of national parks with marine components, including the Fathom Five National Marine Park of Canada on Georgian Bay, Quttinirpaaq National Park of Canada in the arctic and Pacific Rim National Park Reserve of Canada on Canada's west coast. These national marine conservation areas protect representative examples of Canada's natural and cultural marine heritage and provide opportunities for public education and enjoyment.

The Federal Marine Protected Areas Strategy provides a framework to establish a network of marine protected areas in a collaborative and transparent way. The Fisheries and Oceans Canada, Parks Canada and Environment Canada co-operate under Canada's Oceans Action Plan with the provincial, territorial and Aboriginal governments to identify and manage new marine protected areas. They aim to establish a systematic approach to the planning and creation of marine protected areas; enhance the collaboration for management and monitoring of marine protected areas; increase the awareness and participation of Canadians in the marine protected areas network; and link Canada's network of marine protected areas to continental and global networks.

Provincial and Territorial Protected Areas

Provinces and territories also have conservation areas strategies and are creating protected areas. There are many more protected areas created and managed by provincial governments than by the federal government. Roughly 90 percent of

protected areas on this map are under provincial or territorial jurisdiction. However, they cover about half of the area, since provincially and territorially legislated protected areas tend to be smaller than federal ones. As with federally legislated protected areas, the level of protection varies. Provincial parks are set up for the population's enjoyment and to promote discovery, while respecting the area's sensitive zones and keeping environmental impacts to a minimum. Other provincial protected areas, such as ecological reserves and wilderness areas, are established mainly to conserve their natural characteristics and wildlife, and are not accessible to the public.

Aboriginal Protected Areas

Two protected areas of more than 10 square kilometres have been created in the Northwest Territories through Aboriginal land claim agreements and are under direct Aboriginal administration. Aboriginal peoples have been involved in establishing more than a quarter of the total lands in protected areas that are administered by federal, provincial and territorial governments. This involvement has been primarily in the three northern territories, through land claims and other co-operative agreements.

Jointly Managed Protected Areas

A few protected areas are managed by more than one jurisdiction. The largest of these is the Thelon Game Sanctuary. It is administered by the Nunavut and Northwest Territories governments, Aboriginal organizations and Indian and Northern Affairs Canada. The Saguenay–St. Lawrence Marine Park is managed by both Parks Canada and Parcs Québec. It protects the marine environment and informs the public about the world's largest estuary.

International Conservation Designations and Organizations

It is worth noting that some of the protected areas on the map are part of a network of international conservation initiatives, such as UNESCO World Heritage Sites, Wetlands of International Importance (Ramsar Sites) and Biosphere Reserves. It is also worth noting that, through the United Nations Convention on Biological Diversity, countries around the world have developed the Programme of Work on Protected Areas, a comprehensive international workplan for protected areas with an overall goal of completing networks of terrestrial protected areas by 2010 and networks of marine protected areas by 2012.

Such organizations as the International Union for the Conservation of Nature (IUCN) help develop conservation science, manage field projects around the world, and bring together players from different domains and organizations to develop and implement policy, laws and best practices. Other non-government organizations, such as the Nature Conservancy of Canada, the World Wildlife Fund and Ducks



Unlimited are international organizations active in Canada. They work to conserve species at risk and protect threatened habitats. They partner with citizens and governments to help conserve important habitat and promote sustainable use of resources. (For more information on these organizations see the list of Web sites below.)

Data Sources and Methodology

The protected areas data originate from the Canadian Council on Ecological Areas (CCEA) and its members, representing all Canadian provinces, territories and the federal government. The CCEA is a non-profit organization, founded in 1982, whose objective is to facilitate and allow the establishment of a representative network of protected areas. Environment Canada's Canadian Wildlife Service compiled spatial and attribute data for protected areas that were larger than 1000 hectares, and provided the data to the Atlas of Canada. The Atlas of Canada integrated and generalized the protected areas data for national scales of 1:1 000 000 and smaller. The protected areas data set is available as a 1:1 000 000 national framework in GeoGratis (<http://geogratis.gc.ca/geogratis/en/collection/search.do>).

Definitions of underlined terms

Ecosystem: 1) A functional system which includes the organisms of a natural community together with their environment; ecosystems can be viewed as encompassing large and small areas.
2) An integrated and stable association of living and non-living resources functioning within a defined physical location. The term may be applied to a unit as large as the entire ecosphere. More often, it is applied to some smaller division. (Source: Government of Canada Climate Change Site, Glossary of Climate Change Terms)

Estuary: Body of water connected to the sea that is partially enclosed in which one or more rivers and streams flow into.

Habitat: The place or type of site where a plant or animal naturally or normally lives and grows.

Ramsar sites: Ramsar sites are wetlands designated of international importance under The Convention on Wetlands, signed in Ramsar, Iran, in 1971. The Convention on Wetlands is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources. Many Migratory Bird Sanctuaries and National Wildlife Areas are designated as Ramsar sites.

UNESCO Biosphere Reserves: Biosphere reserves are sites recognized under the United Nations Education, Science and Cultural Organization's (UNESCO's) Man and the Biosphere Program, which innovate and demonstrate approaches to conservation and sustainable development. They share their experience and ideas nationally, regionally and internationally within the World Network of Biosphere Reserves. In 2008 there are 531 biosphere reserves worldwide in 105 countries.

UNESCO World Heritage Sites: The United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage sites are areas protected because of their outstanding value to humanity. The Convention concerning the Protection of the World Cultural and Natural Heritage is an international treaty adopted in 1972.

Map Sources

Protected Areas by Jurisdiction

The protected areas data originate from the Canadian Council on Ecological Areas (CCEA) and its members, representing all Canadian provinces, territories and the federal government. Environment Canada's Canadian Wildlife Service compiled spatial and attribute data for protected areas that were larger than 1000 hectares, and provided the data to the Atlas of Canada. The Atlas of Canada integrated and generalized the protected areas data for national scales of 1:1 000 000 and smaller.

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Canada-Quebec. 2008. Saguenay-St. Lawrence Marine Park. <http://www.parcmarin.qc.ca/>

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Environment Canada. 2007. Queen Maud Gulf Migratory Bird Sanctuary, Nunavut - Ramsar Site. <http://www.mb.ec.gc.ca/nature/whp/ramsar/df02s03.en.html>

Environment Canada. 2007. Stalwart National Wildlife Area. <http://www.mb.ec.gc.ca/nature/whp/nwa/df06s08.en.html>

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<http://www.mb.ec.gc.ca/nature/whp/nwa/lml/df09s01.en.html>

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Fisheries and Oceans Canada - Pacific Region. 2006. Endeavour Hydrothermal Vents Marine Protected Area. http://www.pac.dfo-mpo.gc.ca/oceans/mpa/Endeavour_e.htm

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<http://www.tpr.alberta.ca/parks/cypresshills/chipp.asp>

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Nunavut Parks. 2008. On the Land Thelon Wildlife Sanctuary Thelon Heritage River.
http://64.26.129.36/on_the_land/thelon_wildlife_about.cfm

Ontario Parks. 2008. Polar Bear Provincial Park.
<http://www.ontarioparks.com/english/pola.html>

Parks Canada. 2008. Point Pelee National Park of Canada. <http://www.pc.gc.ca/eng/pn-np/on/pelee/index.aspx>

Parks Canada. 2007. Quttinirpaaq National Park of Canada. <http://www.pc.gc.ca/eng/pn-np/nu/quttinirpaaq/index.aspx>

Parks Canada. 2007. Wood Buffalo National Park of Canada. http://www.pc.gc.ca/pn-np/nt/woodbuffalo/index_E.asp

Parks Canada. 2007. Kluane National Park and Reserve of Canada.
<http://www.pc.gc.ca/eng/pn-np/yt/kluane/index.aspx>

Parks Canada. 2007. Banff National Park of Canada. <http://www.pc.gc.ca/eng/pn-np/ab/banff/index.aspx>

Parks Canada. 2007. Nahanni National Park Reserve of Canada. http://www.pc.gc.ca/pn-np/nt/nahanni/index_E.asp

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Parks Canada. 2008. Vuntut National Park of Canada. <http://www.pc.gc.ca/eng/pn-np/yt/vuntut/index.aspx>

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<http://www.algonquinpark.on.ca/index.html>

The Government of Newfoundland and Labrador. 2008. Environment and Conservation <http://www.env.gov.nl.ca/env/>

The Government of Yukon. 2007. Asi Keyi Territorial Park.
<http://www.environmentyukon.gov.yk.ca/parksconservation/AsiKeyiTerritorialPark.php>

UNEP Convention on Biological Diversity. Article 8 on Protected Areas.
<http://www.cbd.int/convention/articles.shtml?a=cbd-08%20>

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Canadian Council on Ecological Areas. <http://www.ccea.org/>

International Union for the Conservation of Nature (IUCN). <http://cms.iucn.org/>

Thelon Game Sanctuary Management Plan.
http://www.mveirb.nt.ca/upload/project_document/1159544997_Thelon%20Game%20Sanctuary%20Management%20Plan.pdf

UNESCO World Heritage <http://whc.unesco.org/en/about/>

World Wildlife Fund Canada <http://www.wwf.ca/>

Related Web sites (1999 – 2009)

Federal Government

Department of Justice Canada, Justice Laws Web Site
<http://laws.justice.gc.ca/eng/UpdateNotice/index.html?rp14=%2Fen%2Findex.html>
The Department of Justice Canada is responsible for and provides access to the Acts and regulations of Canada.

Environment Canada. Canadian Wildlife Service
http://www.cws-scf.ec.gc.ca/index_e.cfm
The Canadian Wildlife Service of Environment Canada handles wildlife matters that are the responsibility of the federal government. These include protection and management of migratory birds as well as nationally significant wildlife habitat. The site links to protected areas for all regions in Canada.

Fisheries and Oceans Canada
<http://www.dfo-mpo.gc.ca/index-eng.htm>
Fisheries and Oceans Canada is the federal Ministry responsible for policies and programs relating to fisheries and oceans.



Fisheries and Oceans Canada. Marine Protected Areas

<http://www.dfo-mpo.gc.ca/oceans/marineareas-zonesmarines/mpa-zpm/index-eng.htm>

The Oceans, Habitat and Species at Risk sector of Fisheries and Oceans Canada provides information on Marine Protected Areas.

Government of Canada. Species at Risk Public Registry

http://www.sararegistry.gc.ca/default_e.cfm

Canada's Species at Risk Public Registry gives information on the country's approach, decisions and activities to protect and recover species at risk.

Hinterland Who's Who. Issues and topics: Environment Canada's Protected Areas Network

<http://www.hww.ca/hww2.asp?id=231>

Canada's Protected Areas Network provides news, information and educational resources regarding protection of Canada's wildlife.

Parks Canada

<http://www.pc.gc.ca/eng/index.aspx>

Parks Canada agency seeks to protect and present Canada's natural and cultural heritage

Provincial/Territorial Government

Alberta Government, Sustainable Resource Development.

<http://srd.alberta.ca/>

Alberta Government, Tourism, Parks and Recreation.

<http://tpr.alberta.ca/parks/default.aspx>

Alberta Government, Tourism, Parks and Recreation. Managing Parks and Protected Areas.

<http://www.tpr.alberta.ca/parks/managing/flashindex.asp>

Gouvernement du Québec, Ressources naturelles et Faune

<http://www.mrnf.gouv.qc.ca/english/home.jsp>

Gouvernement du Québec, Ressources naturelles et Faune. Stratégie québécoise sur les aires protégées. (in French only)

<http://www.mrnf.gouv.qc.ca/aires/index.jsp>

Government of British Columbia. Ministry of Environment. BCParks

<http://www.env.gov.bc.ca/bcparks/>

Government of British Columbia. Ministry of Environment. Environmental Stewardship Division

<http://www.env.gov.bc.ca/esd/>

Government of Manitoba. Parks and Natural Areas

<http://www.gov.mb.ca/conservation/parks/>

Government of Manitoba. Protected Areas Initiative

<http://www.gov.mb.ca/conservation/pai/establishing/>

Government of Newfoundland and Labrador, Environment and Conservation

<http://www.env.gov.nl.ca/env/>

Government of Newfoundland and Labrador, Environment and Conservation, Parks and Natural Areas Division

<http://www.env.gov.nl.ca/parks/parks/>

Government of Nova Scotia, Environment, Air, Land, Water

<http://www.gov.ns.ca/nse/topics.asp>

Government of Nunavut. Department of Environment

<http://www.gov.nu.ca/env/environment.shtml>

Government of Nunavut. Nunavut Parks

<http://www.nunavutparks.com/>

Government of Ontario. Ministry of Natural Resources.

http://www.mnr.gov.on.ca/en/STEL02_168322.html

Government of Ontario. Ministry of Natural Resources. Ontario Parks

<http://www.ontarioparks.com/english/index.html>

Government of Prince Edward Island, Environment, Energy and Forestry

<http://www.gov.pe.ca/envengfor/index.php3?number=77998&lang=E>

Government of Prince Edward Island. Tourism Department

<http://www.tourismpei.com/index.php3>

Government of Saskatchewan. Provincial Parks

<http://www.gov.sk.ca/Default.aspx?DN=99c3c562-1b20-4cc1-9174-4310be1ea7b9>

Government of the Northwest Territories. Industry, Tourism and Investment. Tourism and Parks

<http://www.iti.gov.nt.ca/tourismparks/>

Government of the Northwest Territories. Land and Environment

<http://www.gov.nt.ca/agendas/land/index.html>

Government of Yukon. Environment Yukon. Yukon Parks

<http://www.environmentyukon.gov.yk.ca/parks.php>

Nature's Resorts Nova Scotia Provincial Parks

<http://www.novascotiaparks.ca/default.asp>

New Brunswick, Department of Environment

<http://www.gnb.ca/0009/index-e.asp>

Parcs Québec

http://www.sepaq.com/pq/index.dot?language_id=1

The Government of Yukon. Parks and conservations

<http://environmentyukon.gov.yk.ca/parksconservation/>

The Official Parks Website of the Province of New Brunswick

<http://www.tourismnewbrunswick.ca/Home/Destinations/Parks/ProvincialParks.aspx>

Other

Canadian Council on Ecological Areas

<http://www.ccea.org/>

Convention on Biological Diversity

<http://www.cbd.int/>

Ducks Unlimited Canada. Conserving Canada's Wetlands

<http://www.ducks.ca/index.html>

Ducks Unlimited Canada is a private, non-profit organization committed to wetland and associated habitats conservation.

Nature Conservancy Canada

http://www.natureconservancy.ca/site/PageServer?pagename=ncc_main

The Nature Conservancy of Canada is a private non-profit land conservation organization that partners with corporate and individual landowners to protect Canada's most important natural treasures through land donation, purchase and conservation easement.

The Ramsar Convention on Wetlands

http://www.ramsar.org/cda/en/ramsar-home/main/ramsar/1%5e7715_4000_1___

United Nations Environment Programme (UNEP).

<http://www.unep.org/>

The United Nations Environment Programme web site provides access to various documents including: Stockholm Declaration from the United Nations Conference on the Human Environment (1972), Rio Declaration (1992) and Johannesburg Declaration (2002).

World Charter for Nature

<http://sedac.ciesin.org/entri/texts/world.charter.for.nature.1982.html>

World Wildlife Fund

<http://www.panda.org/>

World Wide Fund for Nature is a non-for-profit organization whose goal is to conserve the world's biological diversity, ensure that the use of renewable natural resources is sustainable and reduce pollution and wasteful consumption.