The **geography of Canada** is vast and diverse. Occupying most of the northern portion of [North America](http://en.wikipedia.org/wiki/North_America) (precisely 41% of the [continent](http://en.wikipedia.org/wiki/Wrangell_Volcanic_Field)), [Canada](http://en.wikipedia.org/wiki/Canada) is the [world's second largest country](http://en.wikipedia.org/wiki/River) in total area after [Russia](http://en.wikipedia.org/wiki/Russia).

Canada spans an immense territory between the [Pacific Ocean](http://en.wikipedia.org/wiki/Mountain_range) to the west and the [Atlantic Ocean](http://en.wikipedia.org/wiki/Border) to the east (hence the [country's motto](http://en.wikipedia.org/wiki/List_of_state_mottos)), with the [United States](http://en.wikipedia.org/wiki/Permafrost) to the south ([contiguous United States](http://en.wikipedia.org/wiki/Contiguous_United_States)) and northwest ([Alaska](http://en.wikipedia.org/wiki/Nunavut)), and the [Arctic Ocean](http://en.wikipedia.org/wiki/Arctic_Ocean) to the north; [Greenland](http://en.wikipedia.org/wiki/Acid_rain) is to the northeast. Off the southern coast of [Newfoundland](http://en.wikipedia.org/wiki/Ellesmere_Island) lies [Saint-Pierre and Miquelon](http://en.wikipedia.org/wiki/Arctic_Cordillera), an [overseas collectivity](http://en.wikipedia.org/wiki/Temperate_rain_forest) of [France](http://en.wikipedia.org/wiki/France). Since 1925, Canada has claimed the portion of the [Arctic](http://en.wikipedia.org/wiki/Quebec) between 60°W and 141°W [longitude](http://en.wikipedia.org/wiki/Longitude) to the [North Pole](http://en.wikipedia.org/wiki/Squamish,_British_Columbia); however, this claim is contested.[[1]](http://en.wikipedia.org/wiki/Canada_geography#_note-0)

Covering [9,984,670](http://en.wikipedia.org/wiki/Northwest_Territories) [km²](http://en.wikipedia.org/wiki/Square_kilometre) or 3,855,103 [square miles](http://en.wikipedia.org/wiki/Manitoba) (Land: 9,093,507 km² or 3,511,023 mi²; Water: [891,163 km²](http://en.wikipedia.org/wiki/Ontario) or 344,080 mi²), Canada is slightly less than three-fifths as large as Russia, less than 1.3 times larger than [Australia](http://en.wikipedia.org/wiki/Assiniboine_River), slightly smaller than [Europe](http://en.wikipedia.org/wiki/Pacific_Coast_Ranges), and more than 40.9 times larger than the [UK](http://en.wikipedia.org/wiki/United_Kingdom). In total [area](http://en.wikipedia.org/wiki/Rift), Canada is slightly larger than both in turn the US and [China](http://en.wikipedia.org/wiki/People%27s_Republic_of_China); however, Canada is somewhat *smaller* than both in land area (China is 9,596,960 km² / 3,705,407 mi² and the US is 9,161,923 km² / 3,537,438 mi²), ranking fourth.

The northernmost settlement in Canada (and in the world) is [Canadian Forces Station (CFS) Alert](http://en.wikipedia.org/wiki/List_of_Nunavut_rivers) (just north of [Alert, Nunavut](http://en.wikipedia.org/wiki/Alert%2C_Nunavut)) on the northern tip of [Ellesmere Island](http://en.wikipedia.org/wiki/Okanagan) – [latitude](http://en.wikipedia.org/wiki/Greenland) 82.5°N – just 834 kilometres (518 [mi](http://en.wikipedia.org/wiki/List_of_New_Brunswick_rivers)) from the North Pole.

The [magnetic North Pole](http://en.wikipedia.org/wiki/Churchill_River_(Atlantic)) lies within the Canadian Arctic territorial claim; however, recent measurements indicate it is moving towards [Siberia](http://en.wikipedia.org/wiki/Newfoundland_(island)).

Encompassed by its [extreme points](http://en.wikipedia.org/wiki/Liard_River#Extreme_points), Canada covers 9,984,670 [km²](http://en.wikipedia.org/wiki/Square_kilometre) (3,855,103 sq. mi) and a panoply of various geoclimatic regions. Canada also encompasses vast maritime terrain, with the world's longest coastline of 202,080 [kilometres](http://en.wikipedia.org/wiki/Ecoregions_of_Canada) (125,567 [mi](http://en.wikipedia.org/wiki/Mile)). The [physical geography](http://en.wikipedia.org/wiki/Lower_mainland) of Canada is widely varied. [Boreal](http://en.wikipedia.org/wiki/Boreal) forests prevail throughout the country, ice is prominent in northerly [Arctic](http://en.wikipedia.org/wiki/Great_Lakes) regions and through the [Rocky Mountains](http://en.wikipedia.org/wiki/Glacier), and the relatively flat [Prairies](http://en.wikipedia.org/wiki/Mile) in the southwest facilitate productive agriculture. The [Great Lakes](http://en.wikipedia.org/wiki/Quebec_City) feed the [St. Lawrence River](http://en.wikipedia.org/wiki/Urban_area) (in the southeast) where lowlands host much of Canada's population.

[[edit](http://en.wikipedia.org/wiki/Hydroelectricity?title=Geography_of_Canada&action=edit&section=2)] **Appalachian Mountains**

*Main article:* [*Appalachian Mountains*](http://en.wikipedia.org/wiki/Appalachian_Mountains)

The Appalachian [mountain range](http://en.wikipedia.org/wiki/Agriculture) extends from [Alabama](http://en.wikipedia.org/wiki/Alabama) in the southern United States through the [Gaspé Peninsula](http://en.wikipedia.org/wiki/Arctic) and the [Atlantic Provinces](http://en.wikipedia.org/wiki/Atlantic_Provinces), creating rolling hills indented by river valleys. It also runs through parts of southern [Quebec](http://en.wikipedia.org/wiki/List_of_Quebec_rivers).

The Appalachian mountains (more specifically the [Notre Dame](http://en.wikipedia.org/wiki/Mackenzie_River) and [Long Range Mountains](http://en.wikipedia.org/wiki/Saint-Pierre_and_Miquelon)) are an old and eroded range of mountains, approximately 380 million years in age. Notable mountains in the Appalachians include [Mount Jacques-Cartier](http://en.wikipedia.org/wiki/Economy_of_Canada?title=Mount_Jacques-Cartier&action=edit) (Quebec, 1,268 m / 4,160 [ft](http://en.wikipedia.org/wiki/Foot_%28unit_of_length%29)) and [Mount Carleton](http://en.wikipedia.org/w/index.php) (New Brunswick, 817 m / 2,680 ft). Parts of the Appalachians are home to a rich [endemic](http://en.wikipedia.org/wiki/Endemic_%28ecology%29) flora and fauna, and are considered to have been [nunataks](http://en.wikipedia.org/wiki/List_of_Alberta_rivers) during the last [glaciation](http://en.wikipedia.org/wiki/Glaciation) era.

[[edit](http://en.wikipedia.org/wiki/1_E12_m%C2%B2?title=Geography_of_Canada&action=edit&section=3)] **Great Lakes and St. Lawrence Lowlands**

[](http://en.wikipedia.org/wiki/Image:Great_Lakes_from_space.jpg)

[http://en.wikipedia.org/skins-1.5/common/images/magnify-clip.png](http://en.wikipedia.org/wiki/Image:Great_Lakes_from_space.jpg)

The Great Lakes from space

*Main articles:* [*Great Lakes*](http://en.wikipedia.org/wiki/Canadian_Arctic) *and* [*St. Lawrence River*](http://en.wikipedia.org/wiki/Pacific_Ocean)

The southern parts of Quebec and Ontario, in the section of the [Great Lakes](http://en.wikipedia.org/wiki/Great_Lakes) (bordered entirely by [Ontario](http://en.wikipedia.org/wiki/Rocky_Mountains) on the [Canadian](http://en.wikipedia.org/wiki/Canadian) side) and [St. Lawrence](http://en.wikipedia.org/wiki/Golden_Horseshoe) basin (often called [St. Lawrence Lowlands](http://en.wikipedia.org/wiki/St._Lawrence_Lowlands)), is another particularly rich sedimentary plain. Prior to its [colonization](http://en.wikipedia.org/wiki/Pacific_Ocean) and heavy [urban sprawl](http://en.wikipedia.org/wiki/Urban_sprawl) of the 20th century, this area was home to large [mixed forests](http://en.wikipedia.org/wiki/Boreal_forest) covering a mostly flat area of land between the [Appalachian Mountains](http://en.wikipedia.org/w/index.php) and the [Canadian Shield](http://en.wikipedia.org/wiki/Overseas_collectivities_of_France) Most of this forest has nowadays been cut down through agriculture and logging operations, but the remaining forests are for the most part heavily protected.

While the relief of these lowlands is particularly flat and regular, a group of [batholites](http://en.wikipedia.org/wiki/Lead) known as the [Monteregian Hills](http://en.wikipedia.org/wiki/Monteregian_Hills) are spread along a mostly regular line across the area. The most notable are [Montreal](http://en.wikipedia.org/w/index.php)'s [Mount Royal](http://en.wikipedia.org/wiki/Mount_Royal) and [Mont Saint-Hilaire](http://en.wikipedia.org/wiki/Endangered_species). These hills are known for a great richness in rare [minerals](http://en.wikipedia.org/wiki/Mineral).

[[edit](http://en.wikipedia.org/wiki/Colonization?title=Geography_of_Canada&action=edit&section=4)] **Canadian Shield**

*Main article:* [*Canadian Shield*](http://en.wikipedia.org/wiki/Ontario)

The northern parts of [Saskatchewan](http://en.wikipedia.org/wiki/Western_Ontario), [Manitoba](http://en.wikipedia.org/wiki/Salmon), [Ontario](http://en.wikipedia.org/wiki/Europe), and [Quebec](http://en.wikipedia.org/wiki/United_States-Canada_border), as well as most of [Labrador](http://en.wikipedia.org/wiki/Labrador), the [mainland](http://en.wikipedia.org/wiki/Hydroelectricity) portions of the province of [Newfoundland and Labrador](http://en.wikipedia.org/wiki/Newfoundland_and_Labrador), are located on a vast rock base known as the [Canadian Shield](http://en.wikipedia.org/wiki/Gasp%C3%A9_Peninsula). The Shield mostly consists of eroded hilly terrain and contains many important [rivers](http://en.wikipedia.org/wiki/Arctic_Ocean) used for [hydroelectric](http://en.wikipedia.org/wiki/Hydroelectricity) production, particularly in northern [Quebec](http://en.wikipedia.org/wiki/Missouri_River) and [Ontario](http://en.wikipedia.org/wiki/Latitude). The shield also encloses an area of wetlands, the [Hudson Bay](http://en.wikipedia.org/wiki/Saskatchewan_River) [lowlands](http://en.wikipedia.org/w/index.php). Some particular regions of the Shield are referred as [mountain ranges](http://en.wikipedia.org/wiki/Nettilling_Lake). They include the [Torngat](http://en.wikipedia.org/wiki/Lowlands) and [Laurentian Mountains](http://en.wikipedia.org/wiki/Laurentian_Mountains).

The Shield cannot support intensive [agriculture](http://en.wikipedia.org/wiki/St._Lawrence_River), although there is subsistence agriculture and small dairy farms in many of the river valleys and around the abundant lakes, particularly in the southern regions. [Boreal forest](http://en.wikipedia.org/wiki/Boreal_forest) covers much of the shield, with a mix of [conifers](http://en.wikipedia.org/wiki/Statistics_Canada) that provide valuable timber resources. The region is known for its extensive [mineral](http://en.wikipedia.org/wiki/Mineral) reserves.

[[edit](http://en.wikipedia.org/wiki/Tundra?title=Geography_of_Canada&action=edit&section=5)] **Canadian Interior Plains**

*Main article:* [*Canadian Prairies*](http://en.wikipedia.org/wiki/Lake_Nipigon)

The Canadian prairies are part of a vast [sedimentary](http://en.wikipedia.org/wiki/Peace_River_(Canada)) [plain](http://en.wikipedia.org/wiki/Athabasca_River) covering much of [Alberta](http://en.wikipedia.org/wiki/Alberta), southern [Saskatchewan](http://en.wikipedia.org/wiki/Drought), and southwestern [Manitoba](http://en.wikipedia.org/wiki/Manitoba), as well as much of the region between the Rocky Mountains and the [Great Slave](http://en.wikipedia.org/wiki/Denmark) and [Great Bear](http://en.wikipedia.org/wiki/Great_Bear_Lake) lakes in [Northwest Territories](http://en.wikipedia.org/wiki/Nelson_River). The prairies generally describes the expanses of (largely flat) arable agricultural land which sustain extensive grain farming operations in the southern part of the provinces. Despite this, some areas such as the [Cypress Hills](http://en.wikipedia.org/wiki/Cypress_Hills) and [Alberta Badlands](http://en.wikipedia.org/wiki/South_Saskatchewan_River?title=Alberta_Badlands&action=edit) are quite hilly.

[[edit](http://en.wikipedia.org/wiki/List_of_rivers_in_Canada?title=Geography_of_Canada&action=edit&section=6)] **Western Cordillera**

*Main articles:* [*Rocky Mountains*](http://en.wikipedia.org/wiki/Boreal_forest) *and* [*Pacific Coast Ranges*](http://en.wikipedia.org/wiki/Image:Portneuf.jpg)

The Canadian cordillera, part of the [American cordillera](http://en.wikipedia.org/wiki/American_cordillera), stretches from the [Rocky Mountains](http://en.wikipedia.org/wiki/List_of_Yukon_rivers) in the east to the [Pacific Ocean](http://en.wikipedia.org/wiki/Pacific_Ocean).

The [Canadian Rockies](http://en.wikipedia.org/wiki/Kootenay_River) are part of a major [continental divide](http://en.wikipedia.org/wiki/Continental_divide) that extends north and south through western North America and western South America. The [Columbia](http://en.wikipedia.org/wiki/Columbia_River) and the [Fraser Rivers](http://en.wikipedia.org/wiki/Fraser_River) have their headwaters in the Canadian Rockies and are the second and third largest rivers respectively to drain to the west coast of North America.

[](http://en.wikipedia.org/wiki/Rocky_Mountains)

[http://en.wikipedia.org/skins-1.5/common/images/magnify-clip.png](http://en.wikipedia.org/wiki/Rocky_Mountains)

[Vancouver](http://en.wikipedia.org/wiki/Broadleaf_forest) has a mild enough climate to support several species of palm trees.

Immediately west of the mountains is a large interior plateau encompassing the [Chilcotin](http://en.wikipedia.org/wiki/Flora_of_Canada) and [Cariboo](http://en.wikipedia.org/wiki/Cariboo) regions in central BC (the [Fraser Plateau](http://en.wikipedia.org/wiki/Great_Slave_Lake)) and the [Nechako Plateau](http://en.wikipedia.org/wiki/Nechako_Plateau) further North. The [Peace River](http://en.wikipedia.org/wiki/Montana) Valley in northeastern British Columbia is Canada's most northerly agricultural region, although it is part of the prairies. The dry, temperate climate of the [Okanagan](http://en.wikipedia.org/wiki/Okanagan) Valley in South central BC provides ideal conditions for fruit growing and a flourishing wine industry. Between the plateau and the coast is a second mountain range, the [Coast Mountains](http://en.wikipedia.org/wiki/Ellesmere_Island). The Coast Mountains contain some of the largest temperate-latitude [icefields](http://en.wikipedia.org/w/index.php) in the world.

On the south coast of British Columbia, [Vancouver Island](http://en.wikipedia.org/wiki/Prairies) is separated from the mainland by the continuous [Juan de Fuca](http://en.wikipedia.org/wiki/Australia), [Georgia](http://en.wikipedia.org/wiki/St._Lawrence_River), and [Johnstone](http://en.wikipedia.org/wiki/Torngat_Mountains) [Straits](http://en.wikipedia.org/wiki/Strait). Those straits include a large number of islands, notably the [Gulf Islands](http://en.wikipedia.org/wiki/Agriculture). North, near the [Alaskan](http://en.wikipedia.org/wiki/Alaska) border, the [Queen Charlotte Islands](http://en.wikipedia.org/wiki/Mining) lie across [Hecate Strait](http://en.wikipedia.org/wiki/Hecate_Strait) from the [Bella Coola](http://en.wikipedia.org/wiki/Arctic) region. Other than in the plateau regions of the interior and the river valleys, most of British Columbia is coniferous forest. The only [temperate rain forests](http://en.wikipedia.org/wiki/Notre_Dame_Mountains) in Canada are found along the Pacific coast in the Coast Mountains, on Vancouver Island, and on the Queen Charlotte Islands.

[[edit](http://en.wikipedia.org/wiki/Mixed_forest?title=Geography_of_Canada&action=edit&section=7)] **Volcanoes**

*Main article:* [*Volcanism in Canada*](http://en.wikipedia.org/wiki/Gold)

[](http://en.wikipedia.org/wiki/Image:Mount_Garibaldi.jpg)

[http://en.wikipedia.org/skins-1.5/common/images/magnify-clip.png](http://en.wikipedia.org/wiki/Image:Mount_Garibaldi.jpg)

[Mount Garibaldi](http://en.wikipedia.org/wiki/Mount_Garibaldi) as seen from [Squamish](http://en.wikipedia.org/wiki/Mainland)

[Western Canada](http://en.wikipedia.org/wiki/Western_Canada) has many many volcanoes and is part of the system of volcanoes found around the margins of the [Pacific Ocean](http://en.wikipedia.org/wiki/Canadian_Arctic_islands), which is called the [Pacific Ring of Fire](http://en.wikipedia.org/wiki/Pacific_Ring_of_Fire). There are over 200 young volcanic centers that streches northward from the [Cascade Range](http://en.wikipedia.org/wiki/St._Lawrence_River) to the [Yukon Territory]. They are grouped into five [volcanic belts](http://en.wikipedia.org/wiki/Hudson_Bay) with different volcano types and [tectonic](http://en.wikipedia.org/wiki/Lowlands) settings. The [Stikine Volcanic Belt](http://en.wikipedia.org/wiki/St._Lawrence_River) was formed by [faulting](http://en.wikipedia.org/wiki/Geologic_fault), cracking, [rifting](http://en.wikipedia.org/wiki/Saskatchewan), and the interaction between the [Pacific Plate](http://en.wikipedia.org/wiki/Pacific_Plate) and the [North American plate](http://en.wikipedia.org/wiki/Canadian_Rockies). The [Garibaldi Volcanic Belt](http://en.wikipedia.org/wiki/Garibaldi_Volcanic_Belt) was formed by [subduction](http://en.wikipedia.org/wiki/Soviet_Union) of the [Juan de Fuca Plate](http://en.wikipedia.org/wiki/Juan_de_Fuca_Plate) beneath the North American Plate. The [Anahim Volcanic Belt](http://en.wikipedia.org/wiki/Mixed_forest) was formed as a result of the North American Plate sliding westward over the [Anahim hotspot](http://en.wikipedia.org/wiki/Magnetic_north). The [Chilcotin Plateau Basalts](http://en.wikipedia.org/wiki/Siberia) is believed to have formed as a result of [back-arc extension](http://en.wikipedia.org/wiki/Exclusive_economic_zone) behind the [Cascadia subduction zone](http://en.wikipedia.org/wiki/Cascadia_subduction_zone). The [Wrangell Volcanic Field](http://en.wikipedia.org/wiki/Hans_Island) formed as a result of [subduction](http://en.wikipedia.org/wiki/Subduction) of the [Pacific Plate](http://en.wikipedia.org/wiki/Ellesmere_Island) beneath the North American Plate at the easternmost end of the [Aleutian Trench](http://en.wikipedia.org/wiki/Aleutian_Trench).

Volcanism has also occurred in the [Canadian Shield](http://en.wikipedia.org/wiki/Quebec). It contains over 150 [volcanic belts](http://en.wikipedia.org/wiki/Canadian_Shield) (now deformed and eroded down to nearly flat [plains](http://en.wikipedia.org/w/index.php)) that range from 600 to 2800 million years old. Many of Canada's major [ore](http://en.wikipedia.org/wiki/Great_Lakes) deposits are associated with [Precambrian](http://en.wikipedia.org/wiki/Chilcotin_Plateau_Basalts) volcanoes. There are [pillow lavas](http://en.wikipedia.org/wiki/Chilcotin_District) in the [Northwest Territories](http://en.wikipedia.org/wiki/Northwest_Territories) that are about 2600 million years old and are preserved in the [Cameron River Volcanic Belt](http://en.wikipedia.org/wiki/Montreal). The pillow lavas in rocks over 2 billion years old in the Canadian Shield signify that great oceanic volcanoes existed during the early stages of the formation of the Earth's crust. Ancient volcanoes play an important role in estimating Canada's [mineral](http://en.wikipedia.org/wiki/Mineral) potential. Many of the volcanic belts bear ore deposits that are related to the volcanism.

[[edit](http://en.wikipedia.org/wiki/Mont_Saint-Hilaire?title=Geography_of_Canada&action=edit&section=8)] **Canadian Arctic**

*Main article:* [*Northern Canada*](http://en.wikipedia.org/wiki/Northern_Canada)

While the largest part of the Canadian Arctic is composed of seemingly non-stop permanent ice and [tundra](http://en.wikipedia.org/w/index.php) north of the [tree line](http://en.wikipedia.org/wiki/Image:Vancouverpalms.jpg), it encompasses geological regions of varying types: the [Arctic Cordillera](http://en.wikipedia.org/wiki/Lower_Mainland) (with the [British Empire Range](http://en.wikipedia.org/wiki/Columbia_River) and the [United States Range](http://en.wikipedia.org/wiki/United_States_Range) on [Ellesmere Island](http://en.wikipedia.org/wiki/Canadian_prairies)) contains the northernmost mountain system in the world. The [Arctic lowlands](http://en.wikipedia.org/wiki/Long_Range_Mountains?title=Arctic_lowlands&action=edit) and [Hudson Bay](http://en.wikipedia.org/wiki/St._Lawrence_Basin) [lowlands](http://en.wikipedia.org/wiki/Fisheries) comprise a substantial part of the geographic region often designated as the [Canadian Shield](http://en.wikipedia.org/wiki/Canadian_Shield) (in contrast to the sole geologic area). The ground in the Arctic is mostly composed of [permafrost](http://en.wikipedia.org/wiki/Gulf_Islands), making construction difficult and often hazardous, and agriculture virtually impossible.

The Arctic, when defined as everything north of the [tree line](http://en.wikipedia.org/wiki/Tree_line), covers most of [Nunavut](http://en.wikipedia.org/wiki/Conifers), and the northernmost parts of [Northwest Territories](http://en.wikipedia.org/wiki/Northwest_Territories), [Yukon](http://en.wikipedia.org/wiki/Grand_Banks), [Manitoba](http://en.wikipedia.org/wiki/Rye), [Ontario](http://en.wikipedia.org/wiki/Natural_gas), [Quebec](http://en.wikipedia.org/wiki/Ore), and [Labrador](http://en.wikipedia.org/wiki/Fruit).

[[edit](http://en.wikipedia.org/wiki/British_Columbia?title=Geography_of_Canada&action=edit&section=9)] Hydrography

[**BC**](http://en.wikipedia.org/wiki/List_of_British_Columbia_rivers)

[**AB**](http://en.wikipedia.org/wiki/Great_Slave_Lake)

[**SK**](http://en.wikipedia.org/wiki/List_of_Saskatchewan_rivers)

[**MB**](http://en.wikipedia.org/w/index.php)

[**ON**](http://en.wikipedia.org/wiki/List_of_Ontario_rivers)

[**QC**](http://en.wikipedia.org/wiki/Tundra)

[**NB**](http://en.wikipedia.org/wiki/Domestic_sheep)

[**PE**](http://en.wikipedia.org/w/index.php)

[**NS**](http://en.wikipedia.org/wiki/Dairy)

[**NL**](http://en.wikipedia.org/wiki/List_of_Newfoundland_and_Labrador_rivers)

[**YT**](http://en.wikipedia.org/wiki/Exclusive_Economic_Zone)

[**NT**](http://en.wikipedia.org/wiki/List_of_Northwest_Territories_rivers)

[**NU**](http://en.wikipedia.org/wiki/Hans_Island)

[](http://en.wikipedia.org/wiki/Image:Canada-Drainage.png)

Drainage basins of Canada

Canada holds vast reserves of water: its rivers discharge nearly 9% of the world's renewable water supply,[[2]](http://en.wikipedia.org/wiki/Geography_of_canada#_note-1) it contains a quarter of the world's wetlands, and it has the third largest amount of [glaciers](http://en.wikipedia.org/wiki/Coal) (after [Antarctica](http://en.wikipedia.org/wiki/Impact_crater) and [Greenland](http://en.wikipedia.org/wiki/Potato)). Due to extensive [glaciation](http://en.wikipedia.org/wiki/Nickel), Canada hosts more than two million [lakes](http://en.wikipedia.org/wiki/Lake): of those that are entirely within Canada, more than 31,000 are between 3 and 100 square kilometres (1.2 & 38.6 mi²) in area, while 563 are larger than 100 km².[[3]](http://en.wikipedia.org/wiki/Annapolis_Valley#_note-2)

There are five main [watersheds](http://en.wikipedia.org/wiki/Drainage_basin) in Canada: the [Arctic](http://en.wikipedia.org/wiki/North_American_plate), [Atlantic](http://en.wikipedia.org/wiki/Atlantic_Ocean), [Pacific](http://en.wikipedia.org/wiki/Four_Corners_(United_States)), [Hudson](http://en.wikipedia.org/wiki/Hudson_Bay) and [Gulf of Mexico](http://en.wikipedia.org/wiki/Acid_rain) watersheds.

The **Atlantic watershed** drains the entirety of the Atlantic provinces (parts of the [Quebec](http://en.wikipedia.org/wiki/Hog_(swine))-[Labrador](http://en.wikipedia.org/wiki/Precambrian) [boundary](http://en.wikipedia.org/wiki/Northeastern_Ontario) are fixed at the Atlantic [continental divide](http://en.wikipedia.org/wiki/Continental_divide)), most of inhabited Quebec and large parts of southern Ontario. It is mostly drained by the economically important [St. Lawrence River](http://en.wikipedia.org/wiki/Manitoba) and its tributaries, notably the [Saguenay](http://en.wikipedia.org/wiki/Saguenay_River), [Manicouagan](http://en.wikipedia.org/wiki/Pacific_Plate) and [Ottawa](http://en.wikipedia.org/wiki/Ottawa_River) rivers. The [Great Lakes](http://en.wikipedia.org/wiki/Tar_Sands) and [Lake Nipigon](http://en.wikipedia.org/wiki/Meteorite) are also drained by the St. Lawrence. The [Churchill River](http://en.wikipedia.org/wiki/Antarctica) and [St. John River](http://en.wikipedia.org/wiki/Iron) are other important elements of the Atlantic watershed in Canada.

The **Hudson Bay watershed** drains over a third of Canada. It covers Manitoba, northern Ontario and Quebec, most of Saskatchewan, southern Alberta, southwestern Nunavut and the southern half of [Baffin Island](http://en.wikipedia.org/wiki/Back-arc_basin). This basin is most important in fighting [drought](http://en.wikipedia.org/wiki/Zinc) in the [prairies](http://en.wikipedia.org/wiki/Canadian_Prairies) and producing [hydroelectricity](http://en.wikipedia.org/w/index.php), especially in Manitoba, northern Ontario and Quebec. Major elements of this watershed include [Lake Winnipeg](http://en.wikipedia.org/wiki/Lake_Winnipeg), [Nelson River](http://en.wikipedia.org/wiki/List_of_Manitoba_rivers), the [North Saskatchewan](http://en.wikipedia.org/wiki/North_Saskatchewan_River) and [South](http://en.wikipedia.org/wiki/Canada) [Saskatchewan Rivers](http://en.wikipedia.org/wiki/Gulf_of_Mexico), [Assiniboine River](http://en.wikipedia.org/wiki/Saint-Pierre_and_Miquelon), and [Nettilling Lake](http://en.wikipedia.org/wiki/Hudson_Bay) on Baffin Island. [Wollaston Lake](http://en.wikipedia.org/wiki/Wollaston_Lake) lies on the boundary between the Hudson Bay and Arctic Ocean watersheds and drains into both. It is the largest lake in the world that naturally drains in two directions.

The [Continental Divide](http://en.wikipedia.org/wiki/Flax) in the Rockies separates the **Pacific watershed** in British Columbia and the Yukon from the Arctic and Hudson Bay watersheds. This watershed irrigates the agriculturally important areas of inner British Columbia (such as the [Okanagan](http://en.wikipedia.org/wiki/Okanagan_River) and [Kootenay](http://en.wikipedia.org/wiki/Quebec) valleys), and is used to produce hydroelectricity. Major elements are the [Yukon](http://en.wikipedia.org/wiki/Yukon_River), [Columbia](http://en.wikipedia.org/wiki/Pacific_Ocean) and [Fraser](http://en.wikipedia.org/wiki/Fraser_River) Rivers.

The northern parts of Alberta, Manitoba and British Columbia, most of Northwest Territories and Nunavut, and parts of the Yukon are drained by the **Arctic watershed**. This watershed has been little used for hydroelectricity, with the exception of the [Mackenzie River](http://en.wikipedia.org/wiki/Square_mile), the longest river in Canada. The [Peace](http://en.wikipedia.org/wiki/Kyoto_Protocol), [Athabasca](http://en.wikipedia.org/wiki/Quebec) and [Liard](http://en.wikipedia.org/wiki/Labrador) Rivers, as well as [Great Bear Lake](http://en.wikipedia.org/wiki/Great_Bear_Lake) and [Great Slave Lake](http://en.wikipedia.org/wiki/Continental_Divide) (respectively the largest and second largest lakes wholly enclosed by Canada) are significant elements of the Arctic watershed. Each of these elements eventually merges with the Mackenzie so that it thereby drains the vast majority of the Arctic watershed.

The southernmost part of Alberta drains into the **Gulf of Mexico** through the [Milk River](http://en.wikipedia.org/wiki/Milk_River_%28Montana-Alberta%29) and its tributaries. The Milk River originates in the Rocky Mountains of [Montana](http://en.wikipedia.org/wiki/CFS_Alert), then flows into Alberta, then returns into the [United States](http://en.wikipedia.org/wiki/United_States), where it is drained by the [Missouri River](http://en.wikipedia.org/wiki/British_Empire_Range). A small area of southwestern Saskatchewan is drained by [Battle Creek](http://en.wikipedia.org/wiki/Battle_Creek_%28Milk_River%29), which empties into the Milk River.

*See also:* [*List of rivers in Canada*](http://en.wikipedia.org/wiki/Newfoundland_(island))

[[edit](http://en.wikipedia.org/wiki/List_of_Prince_Edward_Island_rivers?title=Geography_of_Canada&action=edit&section=10)] Floristic geography

[](http://en.wikipedia.org/wiki/List_of_Nova_Scotia_rivers)

[http://en.wikipedia.org/skins-1.5/common/images/magnify-clip.png](http://en.wikipedia.org/wiki/List_of_Nova_Scotia_rivers)

[Mixed forest](http://en.wikipedia.org/wiki/Mixed_forest) landscape in Réserve Faunique de Portneuf, Québec

*Main article:* [*Ecoregions of Canada*](http://en.wikipedia.org/wiki/Uranium)

Canada has produced a [Biodiversity Action Plan](http://en.wikipedia.org/wiki/Biodiversity_Action_Plan) in response to the 1992 international accord; the plan addresses conservation of [endangered species](http://en.wikipedia.org/wiki/Greater_Sudbury) and certain habitats. The main [biomes](http://en.wikipedia.org/wiki/Biome) of Canada are:

* [Tundra](http://en.wikipedia.org/wiki/Sudbury_Basin)
* [Boreal forest](http://en.wikipedia.org/wiki/Rocky_Mountains)
* [Mixed forest](http://en.wikipedia.org/wiki/1_E11_m%C2%B2)
* [Broadleaf forest](http://en.wikipedia.org/wiki/Greenland)
* [Prairies](http://en.wikipedia.org/wiki/Prairie)
* [Rocky Mountains](http://en.wikipedia.org/wiki/Canadian_Prairies) - vegetation includes various types of tundra and forests
* [Temperate coniferous forests](http://en.wikipedia.org/wiki/Sedimentary), of which the [Temperate rain forests](http://en.wikipedia.org/wiki/Great_Plains) of coastal British Columbia is an example.

*See also:* [*Flora of Canada*](http://en.wikipedia.org/wiki/Baffin_Island)*and* [*Fauna of Canada*](http://en.wikipedia.org/wiki/Fauna_of_Canada)

[[edit](http://en.wikipedia.org/wiki/Continent?title=Geography_of_Canada&action=edit&section=11)] Human geography

Canada is divided into thirteen [provinces and territories](http://en.wikipedia.org/wiki/Provinces_and_territories_of_Canada). According to [Statistics Canada](http://en.wikipedia.org/wiki/Manicouagan_River), 72.0% of the population is concentrated within 150 kilometres (95 mi) of the nation's southern border with the United States, 70.0% live south of the [49th parallel](http://en.wikipedia.org/wiki/49th_parallel), and over 60% of the population lives along the [Great Lakes](http://en.wikipedia.org/wiki/Yukon) and [St. Lawrence River](http://en.wikipedia.org/wiki/Quebec) between [Windsor, Ontario](http://en.wikipedia.org/wiki/Vancouver_Island) and [Quebec City](http://en.wikipedia.org/wiki/Rocky_Mountains). This leaves the vast majority of Canada's territory as sparsely populated wilderness; Canada's population density is 3.5 people/km² (9.1/mi²), among the lowest in the world. Despite this, 79.7% of Canada's population resides in [urban](http://en.wikipedia.org/wiki/Logging) areas, where population densities are increasing.

Canada shares the world's [longest undefended border](http://en.wikipedia.org/wiki/Atlantic_Ocean) with the US at 8,893 kilometres (5,526 mi); 2,477 kilometres (1,539 mi) are with [Alaska](http://en.wikipedia.org/wiki/Alaska). The [Danish](http://en.wikipedia.org/wiki/United_States) island dependency of [Greenland](http://en.wikipedia.org/wiki/Greenland) lies to Canada's northeast, separated from the [Canadian Arctic islands](http://en.wikipedia.org/wiki/Alaska) by [Baffin Bay](http://en.wikipedia.org/wiki/Baffin_Bay) and [Davis Strait](http://en.wikipedia.org/wiki/Great_Lakes). The [French](http://en.wikipedia.org/wiki/Temperate_rain_forests) islands of [Saint-Pierre and Miquelon](http://en.wikipedia.org/w/index.php) lie off the southern coast of [Newfoundland](http://en.wikipedia.org/wiki/Vancouver) in the [Gulf of St. Lawrence](http://en.wikipedia.org/wiki/Gulf_of_St._Lawrence) and have a maritime territorial enclave within Canada's [Exclusive Economic Zone](http://en.wikipedia.org/wiki/Arctic). Canada also shares a land border with [Denmark](http://en.wikipedia.org/wiki/Denmark), as maps released in December 2006 show that the agreed upon boundaries run through the middle of [Hans Island](http://en.wikipedia.org/wiki/North_Pole).[[4]](http://en.wikipedia.org/wiki/Geography_of_canada#_note-3)

Canada's geographic proximity to the United States has historically bound the two countries together in the political world as well. Canada's position between the [Soviet Union](http://en.wikipedia.org/wiki/Barley) (now [Russia](http://en.wikipedia.org/wiki/Russia)) and the US was strategically important during the [Cold War](http://en.wikipedia.org/wiki/Icefield) as the route over the North Pole and Canada was the fastest route by air between the two countries and the most direct route for [intercontinental ballistic missiles](http://en.wikipedia.org/wiki/Volcanic_belt). Since the end of the Cold War, there has been growing speculation that [Canada's Arctic](http://en.wikipedia.org/wiki/Strait_of_Juan_de_Fuca) maritime claims may become increasingly important if [global warming](http://en.wikipedia.org/wiki/Ontario) melts the ice enough to open the [Northwest Passage](http://en.wikipedia.org/wiki/Northwest_Passage).

Similarly, the disputed – and tiny – [Hans Island](http://en.wikipedia.org/wiki/Area) (with Denmark), in the [Nares Strait](http://en.wikipedia.org/wiki/Nares_Strait) between [Ellesmere Island](http://en.wikipedia.org/wiki/St._Lawrence_River) and northern Greenland, may be a flashpoint for challenges to overall claims of Canadian sovereignty in [The North](http://en.wikipedia.org/wiki/Canadian_Arctic).

Similar to the more famous American [Four Corners](http://en.wikipedia.org/w/index.php), Canada has a [point common to two provinces and two territories](http://en.wikipedia.org/wiki/Four_Corners_%28Canada%29), near [Kasba Lake](http://en.wikipedia.org/wiki/Anahim_Volcanic_Belt).

[[edit](http://en.wikipedia.org/wiki/Anahim_hotspot?title=Geography_of_Canada&action=edit&section=12)] Natural resources

Canada's abundance of natural resources is reflected in their continued importance in the [Economy of Canada](http://en.wikipedia.org/wiki/Volcanism_in_Canada). Major resource-based industries are [Fisheries](http://en.wikipedia.org/wiki/Geography_of_Canada), [Forestry](http://en.wikipedia.org/wiki/Forestry), [Agriculture](http://en.wikipedia.org/wiki/Geography_of_canada), [Petroleum products](http://en.wikipedia.org/wiki/Fossil_Fuel) and [Mining](http://en.wikipedia.org/wiki/Physical_geography).

The fisheries industry has historically been one of Canada's strongest. Unmatched [cod](http://en.wikipedia.org/wiki/Cod) stocks on the [Grand Banks](http://en.wikipedia.org/wiki/Coast_Mountains) off Newfoundland launched this industry in the 16th Century. Today these stocks are nearly depleted and their conservation has become a preoccupation of the [Atlantic Provinces](http://en.wikipedia.org/wiki/Cascade_Range). On the West Coast, [tuna](http://en.wikipedia.org/wiki/Plain) stocks are now restricted. The less depleted (but still greatly diminished) [salmon](http://en.wikipedia.org/wiki/Plate_tectonics) population continues to drive a strong fisheries industry. Canada claims 12 nautical miles (22 km) of territorial sea, a contiguous zone of 24 nautical miles (44 km), an [exclusive economic zone](http://en.wikipedia.org/wiki/Strait_of_Georgia) of 200 nautical miles (370 km) and a continental shelf of 200 nautical miles (370 km) or to the edge of the continental margin.

Forestry has long been a major industry in Canada. Forest products contribute one fifth of the nation's exports. The provinces with the largest forestry industries are [British Columbia](http://en.wikipedia.org/w/index.php), [Ontario](http://en.wikipedia.org/wiki/Ontario) and [Quebec](http://en.wikipedia.org/wiki/Mountain_range). 54% of Canada's land area is covered in forest. The boreal forests account for four-fifths of Canada's forestland.

[](http://en.wikipedia.org/wiki/Image:Grain_Elevator_047.jpg)

[http://en.wikipedia.org/skins-1.5/common/images/magnify-clip.png](http://en.wikipedia.org/wiki/Image:Grain_Elevator_047.jpg)

Albertan [grain elevators](http://en.wikipedia.org/wiki/Grain_elevator)

Five per cent of Canada's land area is arable, none of which is for permanent crops. Three per cent of Canada's land area is covered by permanent pastures. Canada has 7,200 square kilometres (2,800 mi²) of irrigated land (1993 estimate). Agricultural regions in [Canada](http://en.wikipedia.org/wiki/Davis_Strait) include the [Canadian prairies](http://en.wikipedia.org/wiki/Tree_line), the [Lower Mainland](http://en.wikipedia.org/wiki/Temperate_coniferous_forests) and interior plateau of British Columbia, the [St. Lawrence Basin](http://en.wikipedia.org/w/index.php) and the Canadian [Maritimes](http://en.wikipedia.org/wiki/Maritimes). Main crops in Canada include [flax](http://en.wikipedia.org/wiki/Mount_Carleton), [oats](http://en.wikipedia.org/wiki/Oat), [wheat](http://en.wikipedia.org/wiki/Nunatak), [maize](http://en.wikipedia.org/wiki/Maize), [barley](http://en.wikipedia.org/wiki/Canadian_Shield), [sugar beets](http://en.wikipedia.org/wiki/Sugar_beet) and [rye](http://en.wikipedia.org/wiki/Volcanic_belt) in the prairies; flax and maize in [Western Ontario](http://en.wikipedia.org/wiki/Windsor,_Ontario); Oats and [potatoes](http://en.wikipedia.org/wiki/Great_Lakes) in the Maritimes. [Fruit](http://en.wikipedia.org/wiki/Stikine_Volcanic_Belt) and [vegetables](http://en.wikipedia.org/wiki/Vegetable) are grown primarily in the [Annapolis Valley](http://en.wikipedia.org/wiki/Ontario) of Nova Scotia, [Southwestern Ontario](http://en.wikipedia.org/wiki/Southwestern_Ontario), the [Golden Horseshoe](http://en.wikipedia.org/wiki/Wheat) region of Ontario, along the south coast of [Georgian Bay](http://en.wikipedia.org/wiki/Georgian_Bay) and in the [Okanagan](http://en.wikipedia.org/wiki/Subduction) Valley of British Columbia. [Cattle](http://en.wikipedia.org/wiki/Cattle) and [sheep](http://en.wikipedia.org/wiki/France) are raised in the valleys of BC. Cattle, sheep and [Hogs](http://en.wikipedia.org/wiki/Appalachian_Mountains) are raised on the prairies, Cattle and Hogs in Western Ontario, Sheep and Hogs in Quebec, and sheep in the Maritimes. There are significant [Dairy](http://en.wikipedia.org/wiki/Canadian_Shield) regions in Central Nova Scotia, Southern New Brunswick, the St. Lawrence Valley, [Northeastern Ontario](http://en.wikipedia.org/wiki/Batholite), Southwestern Ontario, the [Red River](http://en.wikipedia.org/wiki/Red_River_of_the_North) valley of [Manitoba](http://en.wikipedia.org/wiki/Kilometre) and the valleys of eastern British Columbia, on [Vancouver Island](http://en.wikipedia.org/wiki/Vancouver_Island) and the [Lower mainland](http://en.wikipedia.org/wiki/List_of_countries_by_area).

Fossil Fuels are a more recently developed resource in Canada. While Canada's [crude oil](http://en.wikipedia.org/wiki/Crude_oil) deposits are fewer, technological developments in recent decades have opened up oil production in Alberta's [Tar Sands](http://en.wikipedia.org/w/index.php) to the point where Canada now has some of the largest reserves of oil in the world. In other forms, Canadian industry has long exploited large [coal](http://en.wikipedia.org/wiki/Cold_War) and [natural gas](http://en.wikipedia.org/wiki/Intercontinental_ballistic_missile) reserves.

Canada's mineral resources are diverse and extensive. Across the Canadian Shield and in the north there are large [iron](http://en.wikipedia.org/wiki/Manitoba), [nickel](http://en.wikipedia.org/wiki/Global_warming), [zinc](http://en.wikipedia.org/wiki/Johnstone_Strait), [copper](http://en.wikipedia.org/wiki/Copper), [gold](http://en.wikipedia.org/wiki/St._John_River), [lead](http://en.wikipedia.org/wiki/Glaciation), [molybdenum](http://en.wikipedia.org/wiki/Molybdenum), and [uranium](http://en.wikipedia.org/wiki/Fraser_Plateau_and_Basin_complex) reserves. Large [diamond](http://en.wikipedia.org/wiki/Diamond) concentrations have been recently developed in the Arctic, making Canada one of the world's largest producers. Throughout the Shield there are many mining towns extracting these minerals. The largest, and best known, is [Sudbury](http://en.wikipedia.org/wiki/Peace_River_(Canada)), [Ontario](http://en.wikipedia.org/wiki/Ontario). Sudbury is an exception to the normal process of forming minerals in the Shield since there is significant evidence that the [Sudbury Basin](http://en.wikipedia.org/wiki/Canadian_Shield) is an ancient [meteorite](http://en.wikipedia.org/wiki/Atlantic_Provinces) [impact crater](http://en.wikipedia.org/wiki/Tuna). The Shield is also covered by vast [boreal forests](http://en.wikipedia.org/wiki/Quebec) that support an important [logging](http://en.wikipedia.org/wiki/Labrador) industry.

Canada's many rivers have afforded extensive development of [hydroelectric power](http://en.wikipedia.org/wiki/Lava). Extensively developed in British Columbia, Ontario, Quebec and [Labrador](http://en.wikipedia.org/wiki/Labrador), the many dams have long provided a clean, dependable source of energy.

[[edit](http://en.wikipedia.org/wiki/Cameron_River_Volcanic_Belt?title=Geography_of_Canada&action=edit&section=13)] Natural hazards

Continuous permafrost in the north is a serious obstacle to development; cyclonic storms form east of the [Rocky Mountains](http://en.wikipedia.org/wiki/Rocky_Mountains), a result of the mixing of air masses from the [Arctic](http://en.wikipedia.org/wiki/Queen_Charlotte_Islands), Pacific, and North American interior, and produce most of the country's rain and snow

[[edit](http://en.wikipedia.org/w/index.php?title=Geography_of_Canada&action=edit&section=14)] Current environmental issues

Air pollution and resulting [acid rain](http://en.wikipedia.org/wiki/Bella_Coola) severely affecting lakes and damaging forests; metal smelting, coal-burning utilities, and vehicle emissions impacting on agricultural and forest productivity; ocean waters becoming contaminated due to agricultural, industrial, mining, and forestry activities.

*See also:* [*Acid rain*](http://en.wikipedia.org/wiki/Kasba_Lake)*and* [*Kyoto Protocol*](http://en.wikipedia.org/wiki/Saskatchewan)

Global Climate Change and the warming of the polar region will likely cause significant changes to the environment, including loss of the polar bear, the exploration for resource then the extraction of these resources and an alternative transport route [read north west passage now open] to the Panama Canal.