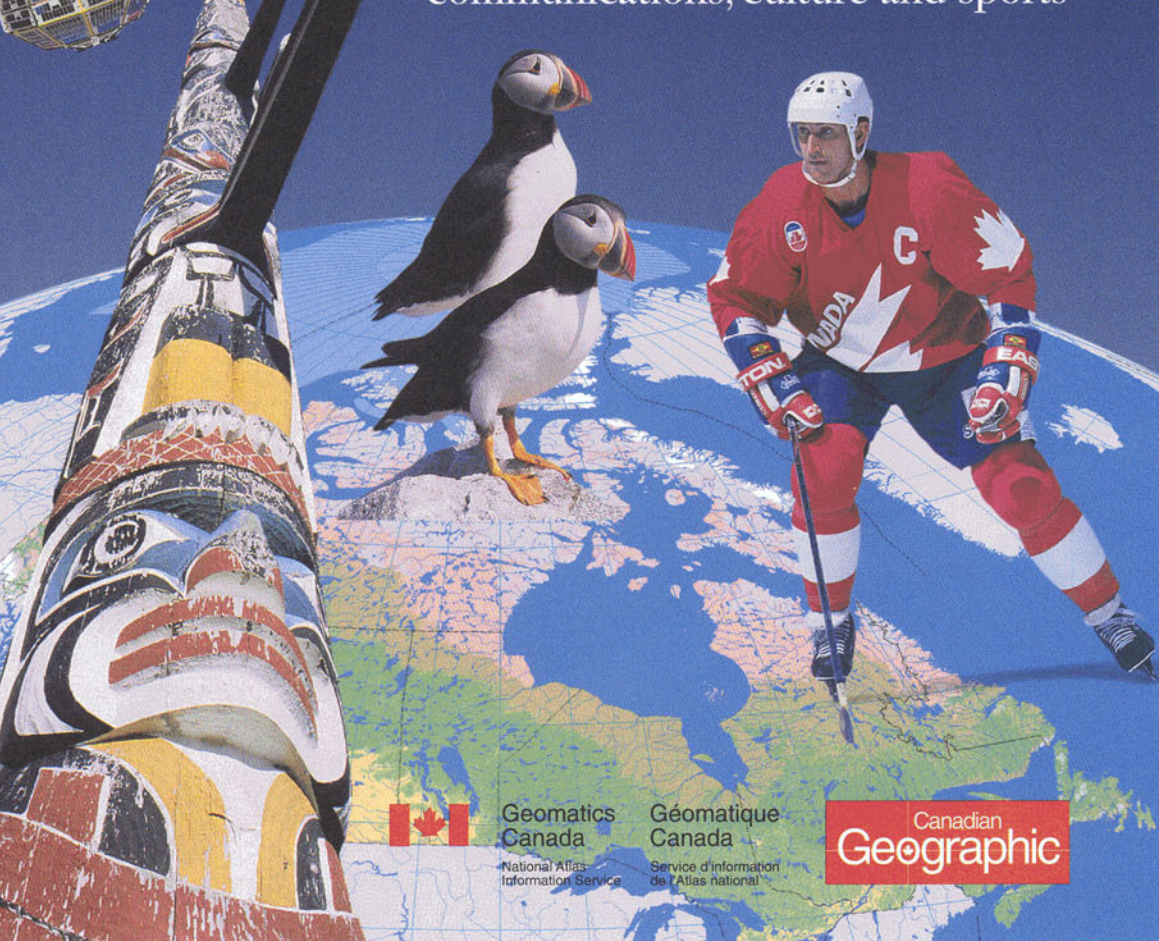


CANADA

A land of SUPERLATIVES

A colourful poster-map featuring Canadian firsts in geography, communications, culture and sports



HERE IS Canada's highest mountain? Which Canadian invented the snowmobile? What is Canada's oldest sport? Our largest animals on sea and land? Reflected on this two-sided poster-map is a diverse nature of vast geography and colourful history, rich in culture and achievement. You will find superlatives — the biggest, highest, longest and first — at provincial, national, and even international levels. Let this compendium of firsts and inventions spark your curiosity about our country. Now, where exactly is our highest mountain...?

Geographical Mosts

What's the highest waterfall in Canada? The oldest rock? The worst earthquake? Read on ...

Canada has the longest coastline in the world, 243,792 kilometres (including the coastlines of 52,455 islands). The biggest bay in the world is measured by shoreline length is Hudson Bay.

The highest island in Canada is Baffin Island, 507,451 square kilometres. The largest island in a freshwater lake in the world is Manitoulin Island in Lake Huron, 2,765 square kilometres.

The biggest lake in Canada is the Canadian portion of Lake Huron, 36,000 square kilometres (out of 59,600 square kilometres in total). The five Great Lakes form the largest body of fresh water in the world. The largest of the Great Lakes, and the largest freshwater lake in the world, is Lake Superior, 82,100 square kilometres, of which 28,700 square kilometres are in Canada. The St. Lawrence Seaway—Great Lakes Waterway, completed in 1959, is the world's longest inland waterway open to ocean shipping, 3,700 kilometres from Anticosti Island in the head of Lake Superior.

The highest mountain in Canada is Mount Logan, N.W.T., 5,959 metres.

Canada's highest hamlet is Lake Louise, Alta., at an elevation of 1,540 metres. The highest small city (with a population of less than 100,000) is Kimberley, B.C., 1,120 metres. The highest big city (with a population of 100,000 or more) is Calgary, 1,045 metres.

The highest major lake (over 100 square kilometres) in Canada is Chilko Lake, B.C., 158 square kilometres at an elevation of 1,171 metres.

The northernmost civilian community in Canada is Grise Fiord on Ellesmere Island, N.W.T., at 76°35'N 83°14'W.

The largest lake wholly in Canada is Great Bear Lake, N.W.T., 31,328 square kilometres. The deepest lake in Canada is Great Slave Lake, 614 metres. The largest lake in the world that drains naturally in two directions is Wollaston Lake, Sask., 2,681 square kilometres, one outlet flows northward west into the Mackenzie River basin, another north-east, then east into the Hudson Bay basin.

The highest waterfall in Canada is Della Falls, B.C., with a 440-metre vertical drop.

The world's largest sand dunes in the mouth of a freshwater bay are found at Sandbanks Provincial Park, Prince Edward County, Ontario. They are up to eight kilometres long.

The largest non-polar ice field in the world is shared by the Yukon and Alaska: 40,570 square kilometres (16,000 square kilometres within Canada), believed to be up to 700 metres deep, with glacial fingers in the valleys up to 30 kilometres long.

The largest wetland in the world is the Hudson Bay Lowlands, approximately 300,000 square kilometres.

The most severe earthquake recorded in Canada occurred off the Quebec/Chlorote Islands of British Columbia, Aug. 22, 1949, with a surface wave magnitude of 8.1.

The earthquake with the highest loss of life in Canadian history occurred off Burn Peninsula, Nfld., on Nov. 18, 1929; 29 people were drowned and extensive damage was caused by a subsequent tsunami.

The oldest rock in Canada is thought to be Acacia spruce, found east of Great Bear Lake, N.W.T. It is 3.96 billion years old, and part of a large fragment of the earth's earliest crust, 700 metres below sea level.

The biggest island in Canada is Baffin Island, 507,451 square kilometres. The largest island in a freshwater lake in the world is Manitoulin Island in Lake Huron, 2,765 square kilometres.

The highest tide in the world, 16.1 metres, was recorded at Burntcoat Head, N.S., in Nova Scotia on the Bay of Fundy.

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Getting the Message

For more than 250 years, Canadians have pioneered in all branches of communications ...

Print
The first newspaper in Canada was the Halifax Gazette in 1752. The first bilingual paper was the Quebec *Gazette/La Gazette de Québec* in 1766. And the first French-language newspaper in North America was *La Gazette du Commerce et de l'Industrie*, begun in Montreal in 1778; it ceased publication after a year, but started up again in 1785 as an English-language paper, and is still going today as the Montreal *Gazette*, making it the oldest continuously operating newspaper in Canada.

The first black newspaper-woman in North America was Mary Ann Shadd, who operated the *Provincial Freeman* in Windsor, Ont., beginning in 1853.

Half-tone reproduction of photographs was invented by Georges Édouard Brassard and William Leggo, and printed in *The Canadian Illustrated News* in Montreal in 1869.

Sara Jeannette Duncan was the first woman permanent newspaper correspondent, for the Montreal *Star*, in 1888.

Artist Joe Shuster of Toronto created the comic book hero, Superman, with Jerome Siegel in 1938.

Telecommunications
The first electric telegraph message sent in Canada was between Toronto and Hamilton, Ont., in 1846.

The first submarine telegraph cable in North America was laid by Frederick N. Gisborne between New Brunswick and Prince Edward Island in 1852;

he also engineered the first link between Cape Breton and Newfoundland in 1856, and Newfoundland and Ireland in 1858. The first telegraph line across Canada was along the Canadian Pacific Railway, completed in 1885. A high-speed Morse code printer was devised by Frederick Creed, a native of Mill Village, N.S., about 1895. And the first transatlantic radio telegraphic message was received by Guglielmo Marconi on Signal Hill, St. John's, Nfld., in 1901. Two-way transatlantic voice radio transmission was achieved in 1906 by Reginald Fessenden of Milton-Est, Que. The first long-distance telephone calls were made by Alexander Graham Bell between the Ontario communities of Mount Pleasant and Brantford, and Brantford and Paris, in 1876. The world's first commercial microwave relay system was installed between Nova Scotia and Prince Edward Island in 1948. The longest submarine telephone cable in the world is the 15,629-kilometre ANZCAN cable from Vancouver to Brisbane, Australia, completed in the 1960s.

The flat disc for recordings was devised by Emile Berliner in Montreal in 1894, the first Gramophone Company was the first to manufacture sound recordings in Canada.

The first commercial radio station in the world was XWA Montreal (later CFMT, now CIBC), on the air since 1919. The first French-language radio station in Canada was CKAC, Montreal, on the air since 1922. The alternating-current radio vacuum tube was invented by E. S. (Ted) Rogers of Toronto in 1925; it led to radios that plug into household electric sockets. He also began the first battery radio broadcasting station, CFRB (the RB being for Rogers batteries), on the air in Toronto in 1929.

The world's first commercial fibre optics telecommunications network was the 3,268-kilometre system created by SaskTel in Saskatchewan in 1982.

the first trans-Canada radio broadcast, to celebrate the Diamond Jubilee of Confederation, was in 1927; the signal was carried by telephone and telegraph wires from Vancouver to Halifax.

The wirephoto machine was invented by Winniepegger William Stephenson in 1921.

The first television pictures in Canada were broadcast in the summer of 1932, using the CKAC radio transmitter in Montreal. The first TV station in Canada was CBF Montreal; it began broadcasting on Sept. 6, 1952.

The first non-U.S., non-Soviet satellite was the Canadian *Alouette 1*, launched in 1962. The first geostationary domestic communications satellite in the world was the Canadian *Anik-A1*, in 1972. The world's first domestic satellite system was Telesat Canada, created for broadcasting and telephone services in 1973. The world's first dual-band commercial communications satellite was the Canadian *Anik-B*, launched in 1979.

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Film

The panoramic camera was patented by John Conroy of Flora, Ont., in 1887. A portable film-developing system was devised by Arthur McCurdy of Baddeck, N.S., in 1890; the patent was sold to Eastman Kodak in 1903 and the device was widely used by amateur photographers for years.

The first in movie history occurred in 1896 when May Irwin of Whitby, Ont., kissed a man in the short film, *The Kiss*. The first advertising film ever made, promoting opportunities and land on the Prairies to potential emigrants in Great Britain, was made by James Freer of Manitoba in 1897.

The first ornately decorated theatre in North America was the Montreal Quincentoscope, built by Léo-Ernest Ouimet in 1907. The top movie star of the silent era (and the actress known as 'America's Sweetheart') was Mary Pickford, born Gladys Smith in Toronto, in 1876. The world's first documentary film was *Nanook of the North*, shot in Canada by Robert Flaherty in 1922. The first Academy Award for a documentary film was won by the National Film Board of Canada's *Churchill's Island* in 1941; the board's Norman McLaren pioneered advanced animation techniques. The first drive-in movie theatre in Canada was the Skyway at Stony Creek, Ont., in 1946. IMAX, invented in 1967 by Ontarians Graeme Ferguson, Roman Kroitor and Robert Kerr, uses the largest film frame (70 millimetres) in motion picture history to project a giant screen image; the first permanent IMAX theatre was at Ontario Place in Toronto. The world's largest publicly attended film festival is the Festival of Festivals in Toronto, begun in 1976.

Medicine Hat, Alta., has more dry days than any other Canadian city: 271 per year without measurable precipitation. The driest region on record in Canada is around Arctic Bay, N.W.T., where only 12.7 millimetres of precipitation fell in 1949.

Weather Ways

Canada has weather, lots of weather, all kinds of weather ...

The greatest annual precipitation on record in Canada was 8,122.4 millimetres at Henderson Lake, B.C., in 1931. Vancouver claims the record among large Canadian cities (population 100,000 up) for the most consecutive days of rain, 29 in 1953, from January 6 to February 3.

The most severe flood recorded in Canada occurred in the Toronto area following Hurricane Hazel, Oct. 14-15, 1954, when more than 180 millimetres of rain fell in 24 hours; 81 people died, 4,000 families were left homeless, and crops and roads were swept away.

The greatest one-day snowfall, 118.1 centimetres, occurred at Lakeside Lake, B.C., on Jan. 17, 1974. The heaviest annual snowfall in the Revelstoke-Mount Copeland area of British Columbia, 2,446.5 centimetres, in 1971-72. Chicomit, Que., leads all Canadian cities for blowing snow, 37 days per year. Victoria, B.C., is the city with the least snow, 47 centimetres per year.

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Winnipeg has more hours of winter sunshine, 358, than any other Canadian city. The most sunshine in one month, 621 hours, was recorded at Barkia, Ellesmere Island, N.W.T., in May 1973.

Of all Canadian cities, St. John's, Nfld., has the most days per year with fog (121), and the most wind (an average annual wind speed of 24 kilometres per hour). Penitenc, B.C., has the least fog; just two foggy days per year. Kelowna, B.C., is the least windy city; 39 percent of wind observations per year indicate calm conditions. Prince Rupert, B.C., has the cloudiest skies, 6123 hours per year, the fewest days of thunderstorms (three per year) and the highest annual precipitation, 2,552 millimetres. Vancouver has the fewest days per year with freezing temperatures, 72. Chicomit, Que., leads all Canadian cities for blowing snow, 37 days per year. Victoria, B.C., is the city with the least snow, 47 centimetres per year.

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Sharing the Planet

From the largest to the smallest, our rich diversity of wildlife sees only our respect and a safe place to live ...

Canada's largest insect is the Cecropia moth (*Samia cecropia* or *Hyalophora cecropia*), with a wingspan of up to 15 centimetres.

The largest animal in Canadian waters is the blue whale (*Balaenoptera musculus*), up to 27 metres long and 132 tonnes in weight.

The largest fish in Canadian waters is the basking shark (*Cetorhinus maximus*), up to 14 metres long. The smallest is southern Ontario's least darter (*Etheostoma microperca*), 2.5 centimetres long.

The largest land animal in Canada is the wood bison (*Bison bison atabascae*) of Alberta, Manitoba and the Northwest Territories; mature males can reach 3.8 metres in length, two metres at the shoulder, and weigh 900 kilograms. The smallest mammal is the pygmy shrew (*Microsorex hoyi*), whose total length is nine centimetres, of which one-third is tail; it lives throughout Canada except for the Far North.

The fastest bird in Canada is the peregrine falcon (*Falco peregrinus*); it may hit 385 kilometres per hour in a dive. The fastest mammal in Canada is the pronghorn (*Antilocapra americana*) of the Prairies; it can reach 95 kilometres per hour in short bursts, 60 kilometres per hour over longer distances.

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Getting There

Canada's vast distances have pushed our inventors to new frontiers ...

The first balloon flight in Canada was undertaken by Prof. Louis Lauriat at Saint John, N.B., in 1840.

The first Canadian to fly an airplane (and the seventh person in the world) was F. W. (Casey) Baldwin, at Hammondport, N.Y., in 1908. The first flight in Canada was that of the *Silver Dart*, designed and flown by J. A. D. McCurdy at Baddeck, N.S., in 1909; it flew 800 metres at an average speed of 65 kilometres per hour. In all, the silver-winged biplane was damaged beyond repair.

The first airmail flight in Canada was from Montreal to Toronto on June 20, 1918, with Royal Air Force Capt. Brian A. Peck piloting a Curtiss P-1. The first bush flight was the Canadair Graham in a Curtiss HS-2L from Trois-Rivières, Que., in 1919. The first aerial survey business was operated by Daniel Owen of Annapolis, N.S., beginning with a timber survey in Labrador in 1919.

The variable-pitch propeller, which allowed a pilot to control the "bite" of the propeller and thus greatly increased aircraft efficiency, was designed by Wallace R. Turnbull of Robesart, N.B., in 1919. Turnbull also built Canada's first twin tunnel. The first trans-Canada flight was by a Canadian Air Force plane, Oct. 7-17, 1920. The first successful Canadian-designed aircraft built in the world was the Noorduyn Norseman, built by Robert Noorduyn in Montreal in 1924. It was also the first Canadian-designed plane to find a significant market outside Canada.

Inertial navigation, a system that allows a pilot to establish location by gyroscope control, was invented in 1934 by Erik Leaver, who grew up in Saskatchewan. The largest anti-asteroid suit, a pressurized flying suit and forerunner of the space suit, was devised by W. R. Franks at the Sudbury, Ont., both established in 1986. The first STOL (short takeoff and landing) aircraft was the Beaver, designed by de Havilland Canada in 1948.

The first Canadian passenger jet plane (second in the world) was the Avro Canada Jetliner, first flown at Malton, Ont., in 1949; it also flew the first international jet air mail, from Toronto to New York, on April 18, 1950. The first pilot to fly a Canadian plane faster than sound was Jan Zurekowski in an Avro Canada CF-100 jet fighter in 1952. The crash position indicator, a system of locating downed aircraft, was devised by Harry Stevenson and David Makow at the National Research Council in Ottawa in 1959. The Galamb remote-control robotic arm was designed and built by the National Research Council and Spar Aerospace Limited for use on the U.S. space shuttle in 1981. Toronto's Lester B. Pearson International Airport is Canada's busiest — handling more than 20 million passengers in 1993.

The first railway in Canada was the Champlain & St. Lawrence, which ran from Quebec between Lake Pariair and Saint-Jean-sur-Richelieu in 1836. The first locomotive manufactured in Canada was the Montreal Express, built in 1851, railway station was first greatly enhanced by the invention of shatterless rails in 1881. The first Canadian-born horse to win the Kentucky Derby was Northern Dancer, owned by Ottawa-born P. P. Taylor, in 1964. The first jockey to win 500 races in a season was Sandy Hawley of Oshawa, Ont., in 1973.

The oldest continuously run stake race for thoroughbred horses in North America is the Queen's Plate, established in Toronto in 1850. The first Canadian-born horse to win the Triple Crown of racing in the United States was Canadian-owned Sir Barton, owned by J. K. L. Ross of Montreal, in 1919. The first Canadian-born horse to win the Kentucky Derby was Northern Dancer, owned by Ottawa-born P. P. Taylor, in 1964. The first jockey to win 500 races in a season was Sandy Hawley of Oshawa, Ont., in 1973.

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