

# WEATHER OR NOT

**C**hanges in plants. Insects scurrying differently. Birds flying a certain way. Beavers building lodges earlier or bigger. For as long as there have been people in this country, there have been people trying to put together clues that might help them figure out what kind of weather was coming. Because when you're unprepared, bad weather can bring really bad things. An unexpected storm could mean the difference between life and death for sailors and fur traders. A long time without rain could dry out berries, leaving Indigenous harvesters without cultural foods for home use or sale. So while people tried to learn from the clouds and the creatures, mostly they were just guessing at what weather might lie ahead. We're so used to detailed forecasts that we forget they weren't always available.



**Kids were some of the first weather observers in Canada! From about 1858 to 1878, students in Canada West (Ontario) made notes every day about things like temperature, rain or snow, wind, clouds and more.**

By keeping track of the weather every day, over time observers can start to see patterns and make predictions. Members of the British army stationed in York (Toronto) took notes about the weather as early as 1840. In the early 1870s, Père Bonneau, a priest serving the military in Quebec, arranged for nuns at 26 convents in the area to observe rainfall. Lighthouse keepers and railway workers also watched and noted weather conditions.





In July 1859, a politician named John A. Macdonald was onboard the *Ploughboy*, a kind of small ship for short cruises. It was out in Lake Huron, heading for Sault Ste. Marie, Ont., when a sudden storm arose. As the waves grew, the *Ploughboy's* engine died and the ship was drifting toward the rocks. The terrified passengers were saved when the anchor finally took hold. Macdonald later wrote to his sister Margaret, "None of the party will again be nearer their graves until they are placed in them." As prime minister, 16 years later he signed the papers that created Canada's weather service.



In 1871, the government set up the Meteorological Service of Canada. At first it was part of the Department of Marine and Fisheries. Its main focus was providing storm warnings for shipping businesses and fishing boats. It sent out the first Canadian warnings for the Great Lakes and Atlantic coast in 1876. Being a sailor was a very dangerous job, so these warnings started saving lives right away.

Although forecasting was centred in Toronto, it soon expanded throughout what is now Canada. By the late 1880s, the government could alert railway offices to big snowstorms. And the Department of Agriculture started observing the weather with farmers in mind.

This device, called a rotary snowplow, cleared the tracks for rail travel.





The R-100 over St. Hubert, Que.

In 1930, the world's largest airship, the R-100, made its way from Britain across the Atlantic Ocean to Canada. The Meteorological Service was responsible for providing weather forecasts along this route. It kept some of its offices open around the clock.



Float plane at a dock in 1933.

Several years into the Second World War, with many men serving in the military overseas, some women (shown at right) were finally given bigger roles in weather forecasting. They first served as meteorological technicians in the air force. It wasn't until the 1970s that the Meteorological Service started to hire larger numbers of women for scientific jobs.



The Joint Arctic Weather Station in Alert.

After the First World War, airplanes, well ... took off. At first they carried mail and freight, but soon they were taking passengers, too. Pilots had to know what kind of wind, rain or snow, fog and other weather to expect. During the Second World War, more than 300 meteorologists were trained to provide forecasts for the Royal Canadian Air Force and British pilots training in Canada.

Canada and the U.S. set up a weather observation system together in 1947. Known as the Joint Arctic Weather Stations or JAWS, the five stations were staffed by four people from each country.





Moviegoers outside a Halifax theatre around 1940.

**F**or a long time, it was against the law to issue a public tornado warning. Officials thought it would scare people or make them think it was dangerous to move to an area that had tornadoes. Besides, forecasts weren't good enough to say exactly when and where to expect a tornado. But on July 14, 1950, Canada put out the world's first official public warning by a weather service. It was about a possible tornado in the Regina area. The city was spared, but several hundred kids who weren't allowed to go on a school trip to the movies didn't appreciate the forecast.

In 1971, the government created a new Department of the Environment, which was in charge of weather forecasting.

Lightning hits the CN Tower in Toronto



Dauphin, Man., became home in 1997 to the first Canadian lightning station as part of the North American Lightning Detection Network.