



Ducks Unlimited Canada
Conserving Canada's Wetlands

Winter Habitat Conditions in Canada

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Mid-winter snowfall has generally been average in British Columbia and habitat conditions remain good in the province. Levels of accumulated snow are variable throughout the Western Boreal Forest at present. There are limited snow accumulations in much of the southern Prairie Provinces at this time, with more northern areas fairing better. Mild temperatures in eastern Canada have somewhat reduced the snowpack, but conditions are still generally good in the region.

Conditions have been wet and cool for the past month in the coastal region of **British Columbia**. On Vancouver Island and the South Coast low and mid-elevation snow are well above average. Wetlands are full with wintering waterfowl and flooded agricultural fields are providing refuge and foraging opportunities for many species in the coastal region. Mid-winter snowfall has been variable in the central Interior, but is average overall and well below last year's record levels. In the southern Interior mid-winter snowfall in the Thompson drainage has been above average, including a high of 129% of average in the North Thompson. Conversely, snowfall in the Okanagan basin has been only 81% of average. Snow conditions are above average in the Columbia basin, and average (overall) in the Kootenay basin of the southeast Interior. However, fall conditions were relatively dry, and the prospect for a frost seal is below average. In the Peace region, snowfall has been average, except for the far northeast, where snowfall has been below average.

Over the past month, temperatures have been at or above the seasonal normal and there has been below average precipitation in **Alberta**. Recent Chinook conditions in western and southern portions of the province have sublimated the existing snow accumulations. The remaining snow is dry, as is typical for this time of year. There is currently 20-40 cm of snow on the ground in the Peace Parkland, 20-30 cm in the northeast aspen parkland and northeast boreal transition zone (BTZ), 10-20 cm in the east and northwest aspen parkland, less than 10 cm in the remainder of the central and southern aspen parkland and 0-5 cm in the prairie, which is not unusual at this time of year. The southern mountain snowpack, which supplies the southern irrigation districts, is near average.

Winter precipitation totals for the November to mid-January period are near average in the prairie, Peace Parkland, southern mountains and eastern aspen parkland and these areas are rated as fair. The northeast parkland and eastern BTZ have received average to above average winter precipitation and are rated as fair to good. The central and northwest aspen parkland have received below average precipitation this winter and are rated as fair to poor. The prairie is average and is rated a fair with pockets of poor.

Through much of Alberta spring habitat conditions are often a reflection of late winter and early spring precipitation events. The Environment Canada seasonal forecast is for normal to above normal precipitation in Alberta for this period. As a result there is some optimism conditions will improve in the coming months.

The usual over wintering waterfowl are present on open water areas associated with power plants, rivers and reservoirs.

Winter snow accumulations vary across **Saskatchewan**, with well below normal accumulations in the southern part of the province that gradually improve towards the north. There is very little snow accumulation in the southwest and southeast corners of the province and the Missouri Coteau has only a few inches of snow, which is well below average. In the central part of the province, snowfall is normal to slightly below normal with the area from Rosetown to Lake Diefenbaker being slightly above normal. The Allan Hills have 15-20 cm of snow. Further north, in the area from Meadow Lake over to Prince Albert and Hudson Bay, snow accumulation is slightly above normal with 30-35 cm. The outlook for spring runoff at this time is poor to fair, but things can change quickly with two and a half months of winter left. Frequent light snowfall in early December helped to carry the snowpack as there has been no significant snowfall since December 3rd and very little snow in the New Year.

Accumulated snow is below average throughout southwestern **Manitoba**. A significant snowfall in early December was closely followed by frequent light snow events, but there has been little precipitation since. December temperatures were close to average and an unseasonably warm period in early January has since been followed by the normal cold January weather. This melting and refreezing has created an improved snowpack on the fields and prevented further loss of blowing snow from fields. This will help retain some much-needed moisture after such a dry summer and fall which resulted in a poor frost seal. An increased snowpack is needed for improved waterfowl conditions this spring.

Winter snow has been widely variable in the **Western Boreal Forest**. Below average temperatures and below average precipitation are forecast for the majority of the region in the upcoming months.

Reports from weather stations and staff indicate that snow accumulation in the Yukon has been well below average this winter, with less than 40% of average in Old Crow (5cm) and Dawson, and between 40-60% of average in Whitehorse. The southeast corner of the Yukon is fairing better, with Watson Lake having 40cm of snow on the ground. Snow accumulation in the Northwest Territories includes Yellowknife and Fort Simpson (59cm) at 115-150% of average, Norman Wells (36cm) at 85-115% of average, and Inuvik at 40-60% of average.

Snow accumulation in northeast British Columbia is near average (85-115%). The higher elevations in the northern Rockies have received good snowfall amounts ranging from 40-150cm. Weather stations in Alberta report 16cm of snow in Elk Island and 23 cm of snow in Lac la Biche, with other northern Alberta boreal locations having 20-30cm of accumulated snow, which is average to above average for this time of year. In boreal portions of Saskatchewan the snow accumulation is above average (115-150%), with La

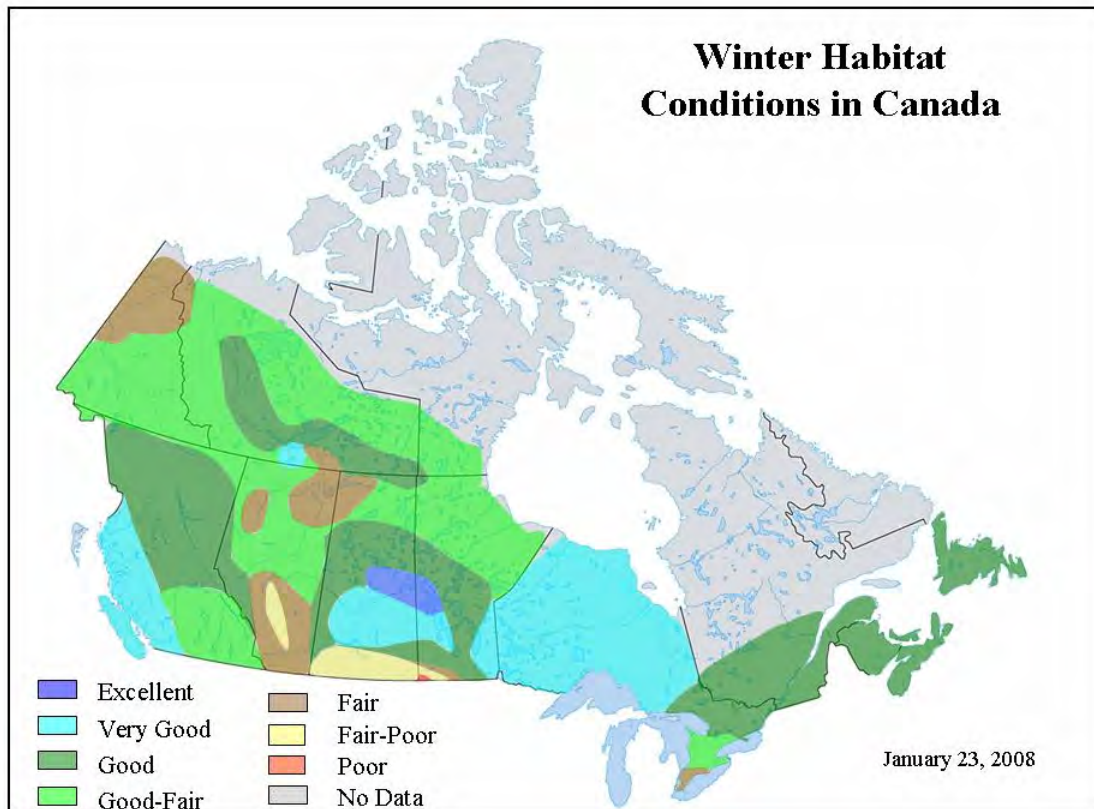
Ronge, Meadow Lake, and Prince Albert reporting snow accumulations of 41cm, 29cm, and 32cm, respectively. In Manitoba, The Pas has 17cm of snow on the ground and Thompson has 34cm of accumulated snow. The region between Lynn Lake and Churchill currently has little snow on the ground (5-10cm), with Churchill's snow accumulation less than 40% of average.

Much of **Ontario** experienced significant snow accumulations throughout December, however, the New Year brought unseasonably mild weather, which caused a province-wide melt. This warm spell resulted in some lakes and rivers opening up across southern Ontario, and many wetland habitats filled to full supply. Soil moisture conditions have greatly improved, but the southern region of the province is largely devoid of snow and continues to have little to no frost seal. As such, habitat conditions presently grade from fair-good in the southwest to good-very good in the southeast, while conditions throughout northern Ontario continue to be rated as very good despite a settling of the snowpack, as a result of the recent warm weather.

In **Quebec**, temperatures were close to average in the first few weeks of December. Mild temperatures near 1°C were accompanied by rain in the last week of December and in early January. The mild weather continued into the second week of January with temperatures between 4-10°C accompanied by more rain. Temperatures have recently returned to the normal range of -10 to -15 °C.

Total precipitation and snowfall in December were above average in all regions except in the northeast (Cote-nord), which received 80% less snow than normal. At the end of December amounts of accumulated snow were close to average in the eastern region and over much of the western part of the province, but the subsequent mild weather decreased the snowpack by 50%. The mean water level of the St. Lawrence was below average (45 cm) at the Sorel station at the end of December, but the milder weather and abundant rain in January contributed to an increase in levels, which bodes well for good habitat conditions throughout the province.

The New Year delivered several winter storms to **Atlantic Canada** in a short period of time, leaving most of the region covered in a thick blanket of snow. The region experienced the usual January thaw, with temperatures well above freezing for a week. This warm period has opened up much more water in the estuaries and inland water bodies, providing feeding areas for most of the waterfowl remaining in the area. Long-range forecasts are calling for colder weather over the entire region for most of this month. Overall, habitat conditions for the Atlantic Canada region are good.



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