



Ducks Unlimited Canada
Conserving Canada's Wetlands

Early Winter Habitat Conditions in Canada

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Habitat conditions are good across much of British Columbia. The Western Boreal Forest has received average to below average snowfall so far, and conditions are generally good-fair in the region. In much of the southern prairies the warm, dry conditions of the fall resulted in a poor frost seal and have combined with below average early winter precipitation to produce habitat conditions ranging from fair-poor to good. Habitat conditions are good in eastern Canada due in large part to the abundant snow that the region has received.

Winter has set in, and conditions are cold and moist in coastal **British Columbia**. Snowfall at higher elevations has been variable, but about average overall. Intermittent snow and rain has caused some concern regarding flooding, and some wetlands are frozen except for small refuges of open water. Consequently, wintering waterfowl are relying on fields or remnant crops and intertidal forage to meet their energetic requirements. Generally, populations of wintering waterfowl appear to be good, with high numbers of snow geese, mallards, and trumpeter swans present.

Early winter snowfall has been slightly above average in the central Interior and the prospect for a frost seal is good. In the southern Interior early winter snowfall has been average and the prospect for a frost seal is good. Early winter snowfall has been slightly below average in the southeast Interior and fall conditions were dry resulting in slightly below average prospects for a frost seal.

Snowfall has been slightly below average in the BC Peace region with less than a foot of snow on the ground. Temperatures have been below average. The prospect for a frost seal is better than last year, but still below average. Waterfowl have now left the Peace region.

Winter didn't arrive in **Alberta** until the latter part of November. The fall of 2007 was typified by warm temperatures and below average precipitation. Precipitation totals for the period from September to mid December period are near average in the southern prairie, northeast and west central aspen parkland and northeast boreal transition zone (BTZ). Elsewhere precipitation totals are below average. As a result, soil moisture levels at freeze-up were near normal in the prairie, southwest and northeast aspen parkland and northeast BTZ. In much of the central aspen parkland and Peace parkland soil moisture was below normal. Currently there is 15-30 cm of snow on the ground in the Peace parkland, 20 cm in the northeast aspen parkland and northeast BTZ, and less than 10 cm in the remainder of the aspen parkland and prairie. The mountain snowpack is near average for this time of the season. In summary, frost seal and early season snow accumulations are rated as poor to fair throughout the parklands and prairies. The usual

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

The fall extended into mid-November and was dry resulting in a poor frost seal across most of **Saskatchewan**. However, wetland conditions in the parklands remained in good to excellent condition, so there should be some carry over water in the spring. Prairie wetland conditions were fair to poor in the fall and this area will need some snow or spring rains to improve wetland conditions. In the past few weeks, the province has experienced below normal temperatures and predictions are for a long and cold winter. Snowfall amounts in the parklands range from 10-38 cm with a recent snowfall delivering another 8-10 cm, depending on the area. In the prairies, snowfall amounts range from 5-20 cm. The snow has typically been light and fluffy so strong winds have moved the snow off the cultivated fields and into the wetlands and road ditches. There are still a few Canada geese around as there is open water along the Saskatchewan River. A number of landowners in northeastern Saskatchewan were actively draining wetlands this past fall given the flooding that occurred this past spring.

In southwestern **Manitoba** unseasonably cold temperatures followed a slightly delayed freeze-up in early to mid-November. Precipitation has been below average during fall and early winter. This coupled with a dry summer resulted in low soil moisture and a poor frost seal. Some freezing and thawing in late October and early November provided extended hunting opportunities for the die-hard sportsmen, but the birds were largely forced out by widespread freeze-up by the 13th of November. Light snowfall has been frequent since freeze-up and southwestern Manitoba received a widespread and significant snowfall on December 4th. These weather systems have resulted in about a foot of snow on the ground. Additional precipitation will be needed for waterfowl arriving in the spring, as conditions range from poor in the extreme southwest to good in the Minnedosa-Shoal Lake pothole area.

Total snow accumulation during November and December has been below average to average for the **Western Boreal Forest** (WBF). Areas that have received abundant snow include a large portion of the Northwest Territories (NWT) and the boreal transition zone in Saskatchewan.

Reports from weather stations and staff indicate that snow accumulation in the Yukon has been well below average this fall and early winter. Whitehorse is currently reporting 7 cm of snow. The Dawson and Old Crow weather stations are not reporting, but snow accumulation appear to be negligible in these areas. The southern Yukon along the BC border has recently had good precipitation and soil moisture conditions should be stable in these areas. The Yukon is expected to have average to below average temperatures, and average to above average precipitation over the next three months.

In the NWT, Norman Wells reports 21 cm of accumulated snow, Fort Simpson 51 cm, Fort Good Hope 23 cm, and Inuvik 31 cm. Below average temperatures are expected in NWT over the next three months. Below average precipitation is forecast in the northeastern half of the NWT, with average precipitation amounts in the southwestern half.

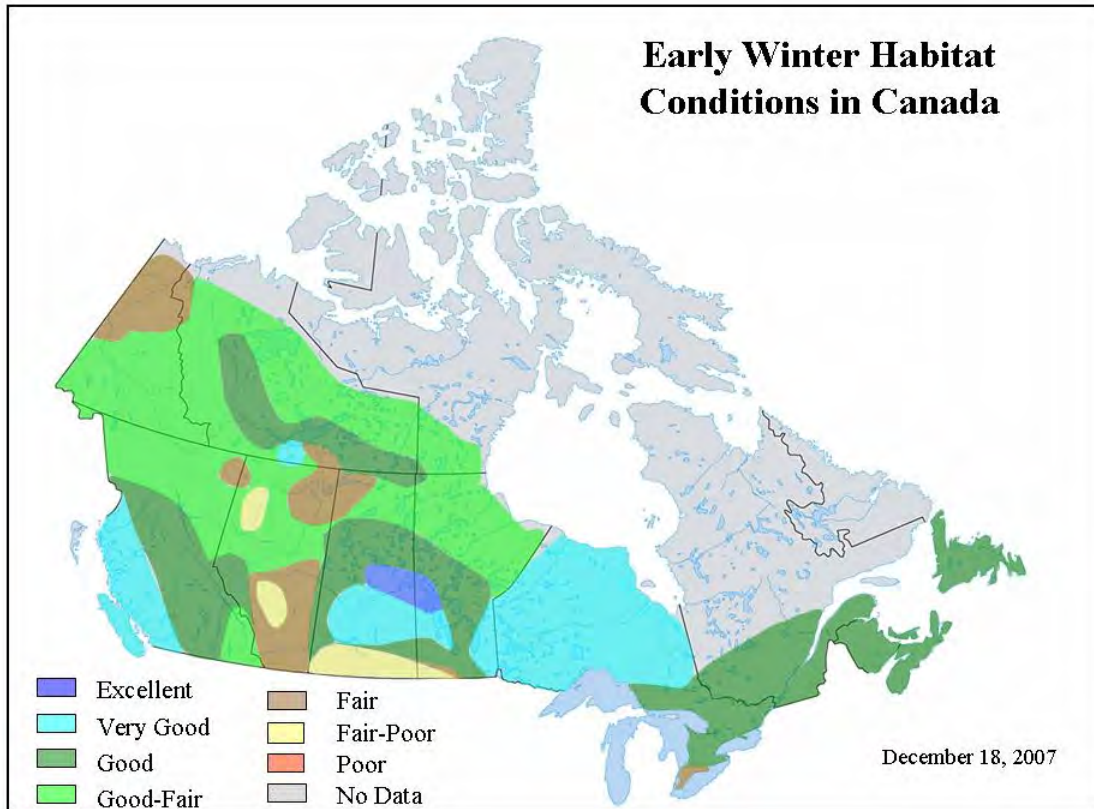
In northeastern British Columbia, Fort Nelson is reporting 19 cm of snow. The higher elevations in the northern Rockies have received good snowfall amounts ranging from 40-100 cm. Below average temperatures and average precipitation are expected over the next three months in the boreal portions of BC and Alberta.

Reports from weather stations in Elk Island and Lac la Biche report 10 cm and 21 cm of snow respectively, with snowfall in other northern Alberta boreal locations ranging from 20-30 cm. In Saskatchewan, La Ronge and Meadow Lake have snow accumulations of 27 cm and 24 cm, while in Manitoba, The Pas and Thompson have 18 cm and 23 cm of snow on the ground. Northern Manitoba (Lynn Lake east to Churchill) currently has little accumulated snow on the ground (0-10 cm). Below average temperatures are expected over the next three months in the boreal portions of Alberta, Saskatchewan and Manitoba. Precipitation in northern Alberta and northern Saskatchewan is forecast to be average; northern Manitoba expects below average amounts of precipitation this winter.

Heading into winter, habitat conditions across southern **Ontario** are generally good, despite low soil moisture levels at freeze-up, which have resulted in a very shallow frost seal. Early December temperatures have been below average and as such, snow now blankets much of the province, except for the coastal areas of southwestern Ontario, where only a dusting of snow was realized. The traditional snow-belt regions of the province, stretching from Lake Huron and Georgian Bay to the Ottawa Valley received the most snow, but accumulations overall have been near normal. Northern Ontario habitats continue to be rated as very good, even though parts of northwestern Ontario received significantly less precipitation than average in November. The abnormally wet fall weather coupled with a return to more seasonal temperatures resulted in a good frost seal throughout the north in advance of snow, which began falling north of Lake Superior and in portions of northeastern Ontario in early November.

Temperatures in November were close to average throughout **Quebec**. Total precipitation was also close to average throughout the province in November except in eastern Quebec, which received 70% more rain than normal. Snowfall has been abundant throughout the province since the beginning of December and is slightly above the monthly average, especially in the Gaspésie and Ottawa River regions. Water levels in the St. Lawrence are still 60 cm below average for November, representing a very low level compared to the last 20 years. The frost seal is not as good as was hoped for, but December's abundant snowfall has resulted in good habitat conditions throughout the province.

Winter has arrived in **Atlantic Canada** and most of the region is experiencing colder temperatures and greater early winter snow accumulation than it has in the past two years. The colder temperatures have resulted in ice-covered inland waters and almost 70% icing of most bays and large rivers. Long-range forecasts are calling for much of the same weather through the rest of the winter. These colder temperatures have provided a good frost seal over the entire region. Overall, habitat conditions for the Atlantic Canada region are good.



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