



Ducks Unlimited Canada
Conserving Canada's Wetlands

Winter Habitat Conditions in Canada

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Snow accumulation has been variable in the western region, including the Western Boreal Forest. More precipitation will be required in portions of British Columbia, Alberta and Saskatchewan to improve prospects for a good spring runoff, while recent precipitation events will have a positive effect on spring habitat conditions in Manitoba. Northern Ontario has had below normal snow accumulations and southern Ontario has experienced significant amounts of rainfall recently, although much of the runoff was absorbed into the soil due to a relatively shallow frost seal. Overall, habitat conditions in Quebec and Atlantic Canada are good.

WESTERN REGION

British Columbia

Along the coast, snowfall has been low over the past month. Mild and stormy weather has melted low-elevation snowpacks. Mid- and high- elevation snowpacks are well below average, but these don't typically have a major influence on habitat conditions. Trumpeter swans and snow geese have been congregating in vegetable residue fields and relay/cover crops, while diving ducks have begun pairing up in anticipation for spring mating. Waterfowl on the Fraser Delta, especially wigeons and mallards, have been taking advantage of any new shoot growth in cover crop fields.

Conditions are variable in Interior British Columbia. Most of the central Interior has experienced average to above average snow accumulation although some areas, such as the Chilcotin, are still below normal. In the southern Interior, snow accumulation is slightly below average in the Thompson basin and well below average in the Lower Fraser and Okanagan drainages. In the southeast Interior, snow accumulation is still below average in the Columbia and Kootenay basins.

Snow accumulation has been slightly above average in the Peace region this winter, although windy weather has removed some snow via sublimation

over the past month. Peace wetlands were in poor condition last fall due to drought, and an above average runoff will be required to restore them to normal.

Western Boreal Forest

In the Northwest Territories (NWT), Yellowknife had received almost all of its typical annual snowfall by November and 145% of its normal snowfall in January. Norman Wells experienced an average snowfall for January, while Hay River had 210% of its normal snowfall. Conditions in the Yukon are similar to the NWT. Winter snow accumulation is above normal in southern regions, and Whitehorse has experienced just above 200% of its average snowfall for January. Overall, it has been colder than normal but there have been days of warm temperatures and melting snow. Some speculate that there may be flooding in the southeast, along the Liard River.

While some of southern Alberta is experiencing below average snowfall and above normal temperatures, areas north of Edmonton have received above normal snowfall for January. Cold Lake has had 146% of its normal snowfall, while High Level has had 189% of its normal snowfall.

Periods of above normal temperatures have occurred in some areas of Saskatchewan, which has resulted in some rain events and melting snow. Many Boreal and Boreal Transition communities are experiencing average snowfall for January. Further north, Buffalo Narrows has received 165% of its average snowfall for January. To the south, Melfort, has seen below normal snowfall accumulation for January.

In Manitoba, snowfall has been average to above average. As of February 10, the Pas had experienced >50% of their monthly precipitation average and temperatures have been near normal. In January, average ice thickness was 52 cm on 15 wetlands in the Cumberland Marshes. Early expectations in The Pas are for a lower water level in the spring. Further north, Flin Flon reports snowfall accumulation at 214% of normal for January.

PRAIRIE REGION

Alberta

After a cold and snowy December, the first part of 2009 was relatively warm and dry in Alberta. Temperatures have been 1 to 2 degrees above normal and the dry trend from the fall continued in most areas, with precipitation less than 50% of the normal amount since November.

Currently, there is 30 to 50 cm of snow on the ground in the Peace Parkland and 20 to 30 cm of snow in the north Aspen Parkland and Boreal Transition Zone (BTZ). In these areas, most of the ground is covered by a layer of snow with some bare hilltops and greater accumulations in drifts. There is less than 15 cm of snow in the south central Aspen Parkland, where most hilltops are bare and stubble is showing through the snow in crop fields. In the northern Prairie, there is less than 5 cm of snow on the ground, fields are bare and snow is restricted to drifts in roadside ditches and other sheltered areas. Generally, there is less than 10 cm of snow in the southern Prairie, but fields remain covered in some locales. The southern mountain snowpack, which supplies the southern irrigation districts, is currently below average. Between November and mid February, precipitation totals were near average in central Prairie, BTZ and Peace Parkland and below average in most of the Aspen Parkland.

The usual over wintering waterfowl are present on open water areas associated with power plants, rivers and reservoirs. Through much of Alberta, spring habitat conditions are often a reflection of late winter and early spring precipitation events. Significant precipitation is required over the next few months to improve prospects for an average spring runoff.

Saskatchewan

Temperatures across Saskatchewan have varied considerably over the past month, ranging from -30 to +5 C. This has helped to create a frost seal in areas that had little moisture in the fall. In general, the snowpack across the province ranges from 15 to 30+ cm. Most areas of the province could do with more snow to increase the likelihood of a good spring runoff.

The southeastern and south central parts of the province, including the Missouri Coteau, have experienced above average snow conditions (30+ cm), which is the most snow this area has seen for several years. The southwest and west central parts of the province have < 15 cm of snow and summer fallow fields are bare.

The northwestern, north central and northeastern parts of the province have 15 to 30 cm of snow, but those areas have received little snow over the past month and snow conditions are deteriorating. The deteriorating snowpack has allowed some producers to get out on the land and clear bush.

Manitoba

In Manitoba, the colder than normal temperatures of December and early January gave way to average or above average temperatures in February. Precipitation had been limited, until a storm event during the second week of February. All of southern Manitoba was affected by this storm, which dropped a significant amount of rain, freezing rain and snow over three days. Some areas reported over an inch of rain, and eastern portions of the Killarney and Minnedosa / Shoal Lake Pothole regions received up to an inch of accumulated precipitation.

Generally, the primary breeding ranges of southwestern Manitoba have received average to slightly above average precipitation this winter. Winter snow accumulations improve as you move east from the Saskatchewan border, which is good news for the Minnedosa / Shoal Lake Pothole region that had favorable wetland conditions this past fall. Although the Killarney Pothole landscape has also benefited from these winter accumulations, more precipitation is required to produce optimal spring conditions for waterfowl in this area. Soil moisture conditions are low in the Killarney landscape and increase in a northerly direction from the US border, resulting in poorer runoff conditions in areas south of Brandon.

Overall, recent snow accumulations throughout the region will have a positive effect on spring habitat conditions, which will likely improve along a northeast gradient from southwest corner of the province.

EASTERN REGION

Ontario

A recent surge in temperature, coupled with intensive rains, has led to a wide-scale early thaw throughout southern Ontario. Prior to this, snow accumulations had been above average across most the province due to persistent cold temperatures. Now, however, much of the southern region has little to no snow. Despite significant amounts of rainfall, most runoff was absorbed directly into the soil due to a relatively shallow frost seal, which means water levels in most feeder creeks, streams and ditches were contained within their banks. However, ice jams did occur on some major waterways in southwestern Ontario, resulting in localized flooding. Wetlands across the southern region are at full supply. Although the snowpack in the south central and southeastern parts of the province is better than in the southwest, spring runoff is likely to be much reduced in all areas without additional snow accumulations.

Northern Ontario has experienced very cold winter weather and below normal snow accumulations. The region has not received the same recent rainy weather as southern areas have, so much of their snowpack still remains in advance of the spring thaw.

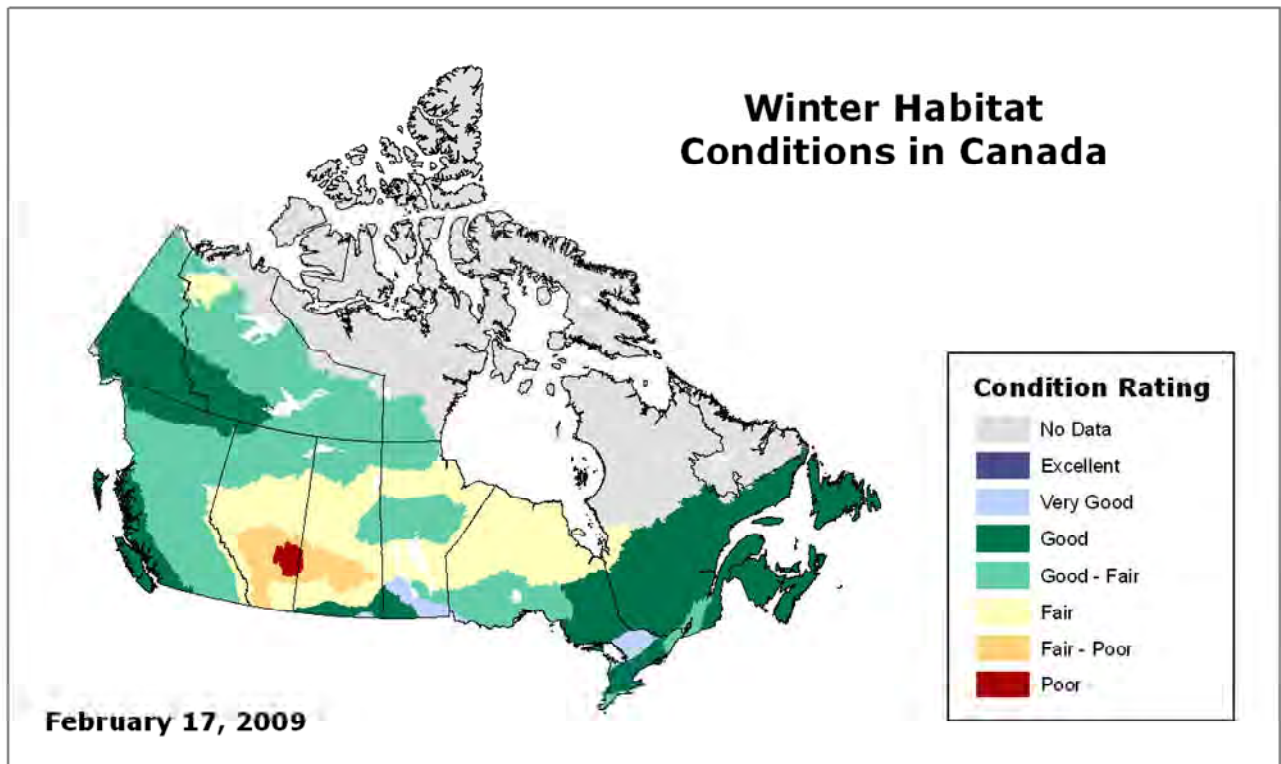
Quebec

January was abnormally cold in Quebec. In fact, it was the fifth coldest January in the past 60 years in the province, with average temperatures ranging from 1.9 to 3.5 C below normal. A cold wave was recorded from January 14 to 18 and was particularly intense in the east, where it reached a historical record. Total precipitation was generally close to or slightly below average throughout the province. The layer of snow on the ground is also slightly below average, except in western Quebec (Ottawa River Valley and Montreal). Overall, habitat conditions are good throughout the province, but more snow is needed on the ground to maintain these conditions.

Atlantic Canada

Snow accumulations have been on par with previous years in Atlantic Canada. The only exception is found in northern New Brunswick, where there is more snow now than this time last year. Most of the region is experiencing normal seasonal temperatures and snowfall amounts.

Winter waterfowl surveys are underway throughout the region and early reports are showing good numbers of birds. The long range forecast predicts temperatures at or above normal, which will benefit waterfowl by preventing areas from completely icing over, thus providing sufficient levels of food. Overall, habitat conditions in Atlantic Canada are good.



Prepared by Meagan Hainstock

Field Contacts:

- British Columbia - Bruce Harrison
- Alberta - Ian McFarlane
- Saskatchewan - Michael Hill
- Manitoba - Mark Francis
- Western Boreal Forest - Brent Friedt
- Ontario - Scott Muir
- Quebec - Patrick Harbour
- Atlantic Canada - Wade Lewis