



Ducks Unlimited Canada
Conserving Canada's Wetlands

Early Spring Habitat Conditions in Canada

March 10, 2008

Habitat conditions are good along the British Columbia coast and in the central Interior, with conditions ranging from fair to good in the southern and southeast Interior. Conditions remain variable in the Western Boreal Forest at present. In the prairies, snow accumulations remain well below average and more precipitation is needed to improve conditions before spring migration. The parklands are generally rated as good or better. Eastern Canada has received significant snowfall since January, and conditions in the region are generally very good.

Conditions have been wet and mild this winter in coastal **British Columbia**, but snowfall was relatively low over the past month, and accumulations are below average along the south coast and at lower elevations. Higher elevation snow packs are still above normal, and spring water conditions are not expected to be limiting. Wetlands remain ice-free and productive with the warming temperatures. Many agricultural cover crops in the Lower Mainland have been consumed by hungry waterfowl as they store up fuel for the pending migration. Marine habitats will soon be brimming with Pacific herring spawn which provides an abundant food source for wintering and migrating sea ducks.

Snowfall was variable this winter in the central Interior, but generally average overall. The frost seal was likely good, and spring habitat conditions are expected to be good as well. In the southern Interior snowfall was above average in the Thompson drainage, but below average in the Okanagan. Spring conditions are expected to reflect this variability. Snow accumulation was very low in the past month in the southeast Interior, and has been below average overall. Given the apparent poor frost seal, spring conditions are expected to be below average in the region.

Generally, snowfall has been near normal in the Peace region. Recent warm weather has settled much of the snow with some ice/water accumulation in low-lying areas. The frost seal was apparently good, due to fall moisture, and runoff is expected to be average if the spring melt is quick.

Early February was cold and snowy in **Alberta** following a couple of months of average to above average temperatures and average to below average precipitation. However, the latter part of February was generally warm and dry and this trend has continued into March and eroded the winter snowpack.

There is currently 20-60 cm of snow on the ground in the Peace Parkland with stubble fields fully covered. A similar situation prevails in the northeast aspen parkland and northeast Boreal Transition Zone (BTZ) with a snow pack of 20-40 cm. Snow cover declines to the south and west with 10-25 cm in the east and northwest aspen parkland,

less than 10 cm in the central and southern aspen parkland with stubble fields half full and 0-5 cm in the prairie. South and east of Red Deer most stubble fields are bare with some snow accumulations remaining in drifted areas. The southern mountain snowpack that supplies the southern irrigation districts is near average to above average.

Based on current snow conditions and the prospects for spring runoff, habitat conditions in the northern Peace parkland, BTZ and northeast aspen parkland are rated as good to very good. The south Peace parkland and the east and northwest aspen parkland are rated as fair to good. The central and southern aspen parkland and the prairie are rated as fair to poor. Through much of Alberta spring habitat conditions are often a reflection of late winter and early spring precipitation events. Recent light snow events across the province are an encouraging sign for the spring. 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. Canada geese are expected to start moving into their breeding areas at any time.

In general, it looks like wetlands in the parklands of Saskatchewan will be in good to excellent shape this spring while habitat conditions in the prairies will be poor to fair. Across the parklands, snow accumulation has tapered off compared to earlier in the year, but run-off potential is still good to excellent. Most wetlands in the parklands were full going into fall, so even in areas where the snow cover is not significant wetlands should be in good condition for the spring. Strong winds have been prevalent on several days and have blown the snow into huge drifts along fence lines, bluffs and into wetlands. The northwest part of the province seems to be experiencing the best conditions for run-off this spring and the priority landscape of the Thickwood Hills should be in good shape. In the prairies, snow accumulations are been below average and many of the wetlands had low water levels in the fall. As such, run-off is predicted to be poor to fair in most areas including the Missouri Coteau and southeastern parts of the province. Temperatures are expected to be above freezing this week, which may start melting the snow and ice. A few groups of mallards and Canada geese have been sighted along the river in Saskatoon.

Accumulated snow remains below average in southwestern Manitoba and temperatures remain average or slightly below average. The region has not received a significant snowfall since the first week in December. Winter snow accumulation is now well below average throughout the pothole region where accumulations this winter are less than 50mm of accumulated precipitation. The Minnedosa /Shoal Lake pothole region has slightly more snow than the Killarney pothole region where some knolls in open fields are showing bare soil. Frequent strong winds have deposited what little snowfall there is in vegetated areas including wetland fringes. This will help the larger wetlands to some extent, but the need for precipitation before migration is now becoming urgent. A lack of summer and fall rains in 2007, a poor frost seal and well below average winter snow accumulations throughout the major breeding areas in Manitoba will result in unfavourable conditions for migrating waterfowl this spring. The Shoal Lake/Minnedosa pothole region will be less affected as this area is still benefiting from extremely wet conditions of past years.

Snow accumulation in the **Western Boreal Forest** (WBF) has been variable this winter, but is generally average to below average. Below average temperatures are expected for the WBF in the coming months. Above average precipitation is forecast for the WBF south of 60, while the Yukon and Northwest Territories are expected to receive average to below average precipitation.

Precipitation in the Yukon has been well below average in the north and near average in the south. Old Crow, which lies along the Porcupine River in the far north of the Yukon Territory, has received less than 40% its average precipitation and currently has 4 cm of accumulated snow. The Old Crow Flats is known as an extremely valuable wetland complex and is important to many waterbirds. In other parts of the Yukon, Dawson received 150-200% its average precipitation this winter – this area has received below average precipitation amounts over the past few years. Conditions in Whitehorse (22 cm of snow) are 60-85% its average and snow accumulation improves as you head east toward Teslin (50 cm) and Watson Lake (62 cm).

In the Northwest Territories, precipitation in the northern portions of the Mackenzie River Valley is well below average this winter. Current snow accumulations in Norman Wells and Inuvik, are 13 cm and 40 cm, respectively, about 40-60% of average. The south is fairing better with Yellowknife at 115-150% its average, and Fort Simpson (49 cm) and Hay River (39 cm) receiving near average amounts. The fire risk is predicted to be high in the region between Great Slave Lake and Great Bear Lake in the coming months.

Snow accumulation in northeast British Columbia is around average (85-115%), with Fort Nelson and Fort St. John reporting 46 cm and 62 cm, respectively. Current snow accumulation from weather stations in Alberta includes Cold Lake (34 cm), Lac la Biche (23 cm), Red Earth (44 cm), and Fort McMurray (50cm). In general, northern Alberta has seen an average amount of snow with localized highs along the Alberta-Saskatchewan border between Cold Lake and Fort McMurray; and lows around Slave Lake. Despite decent snow amounts, the predicted fire risk is still very high for northeast Alberta.

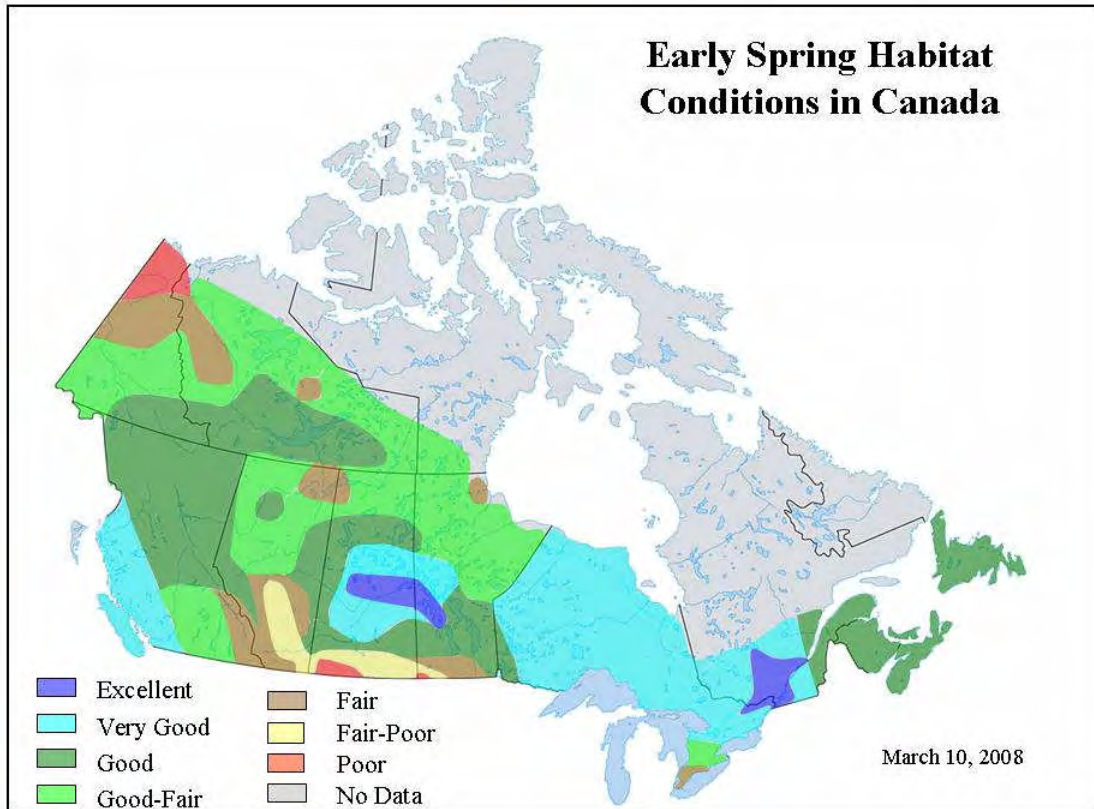
Northern Saskatchewan has primarily had above average snow accumulation (115-150%). In the far north of both Saskatchewan and Manitoba, snow accumulation and conditions are near average and improve as you get further south in the boreal forest. Current snow accumulation from weather stations in boreal Saskatchewan includes Buffalo Narrows (30cm), La Ronge (61 cm), and Uranium City (59 cm). In Manitoba, The Pas and Thompson have 49cm and 47cm of snow on the ground. The area around The Pas could see localized flooding again this spring, as this region has had above average precipitation for the past few seasons.

February saw a return to wintry weather after the mild temperatures of January caused a large-scale thaw across much of southern **Ontario**. New monthly snowfall records were set at several locations, although a brief lull in the cold temperatures saw widespread rains fall throughout much of the southern and central regions of the province. These precipitation-producing storms recharged much of the wetland base but also reduced the snow pack in many areas, especially in southwestern Ontario where little to no snow remains. As such, spring habitat prospects grade from fair in the southwest to

very good in the southeast, while the traditional “snow belt” region of Ontario is rated as very good to excellent, especially in the Ottawa Valley area where more than 300 centimetres of snow has fallen this winter. Spring habitat conditions for both northeastern and northwestern Ontario are also projected to be very good due to a good frost seal and above average winter snowfall accumulations.

January temperatures were 2.5-4.5 °C above average in all **Quebec** regions. Temperatures were between 10 °C and 11 °C on January 8th and 9th, close to the 1950 record of 13 °C. February temperatures were closer to average throughout the province. In January total snowfall remained below the seasonal average in all but the Quebec, Mauricie and Montreal regions. In February snowfall was abundant in all but the northern regions. Snowfall has been particularly heavy in regions along the St. Lawrence River, and by the end of January these regions had already received the average annual total of snow with above average amounts received by the end of February. Abundant precipitation and a good snowpack across all regions has improved the outlook for spring habitat conditions to very good in most regions and excellent along the St. Lawrence River.

Atlantic Canada is still getting winter in true fashion. Snowfall amounts in February and March have seen similar to those decades ago. Snow accumulation throughout the region has been significant since the beginning of the New Year. This heavy accumulation of snow will make for good spring habitat conditions. The long-range forecast for the rest of the month of March is seasonably warm temperatures, with normal amounts of precipitation. Within the next week or two we should start to see the return of some Canada geese to the region, with numbers increasing closer to the end of the month. Overall, habitat conditions for the Atlantic Canada region are good.



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