



Ducks Unlimited Canada
CANADA'S CONSERVATION COMPANY

Early Spring Habitat Conditions in Canada

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Early spring habitat conditions now range from good to excellent in British Columbia, with some ponds in the central Interior likely to fill for the first time in a few years. Conditions in the parklands of the Prairie Provinces are generally very good, while dry conditions persist in the prairies of Alberta and Saskatchewan. The Western Boreal Forest is expected to provide returning waterfowl with good habitat this spring, as is the majority of Eastern Canada. Early migrant waterfowl have begun to return to many parts of the country.

The last three months have brought above average precipitation and multiple storms to coastal **British Columbia**. Many low-lying fields are flooded, and wetlands are full. Snowpacks are well above normal (135-145 per cent of average) and are generally at the second highest levels on record. On the Fraser Delta, Canada geese and mallards have paired up for breeding, and trumpeter swans and American wigeon are abundant in agricultural crops in the upper valley. The snow geese have made their way back to the Fraser Delta from the Skagit Valley and will probably stay for another month.

Snowfall has tapered off in the last month in the central Interior and the snowpack is now "near record" in the north (Bulkley and Nechako drainages), and well above normal (110-130 per cent of average) in the south. Spring runoff is expected to be well above normal, and many ponds will likely fill for the first time in a few years. Geese arrived in the area in early March, and the larger (ice-free) rivers have abundant waterfowl.

In the southern Interior snowfall has tapered off in the last month and the snowpack is now above normal (110-115 per cent of average) in the Thompson drainage, and normal in the Okanagan. Spring runoff is expected to be above normal in the Thompson.

Snowfall has tapered off in the last month in the southeast Interior. The snowpack is above normal (110-130 per cent of average) in the Columbia drainage, but normal in the Kootenay. Spring runoff is expected to be above normal in the Columbia.

Snowfall has been very high (1.5-2 m) in the Peace region, and snow continues to fall. The snowpack is well above normal (130-150 per cent of average). Conditions in the far northeast are not quite as good (~120 per cent of average) as they are in the Peace region. Spring runoff is expected to be well above normal. Migrant birds have yet to arrive in the region.

Over the past month there have been a few spring-like days in **Alberta** with temperatures ranging from 10-15°C. Otherwise, temperatures have been seasonable and have fluctuated around the freezing level. Even on cold days the sun has been warm enough to sublimate and melt the snowpack. Temperatures have typically been dipping below freezing at night, which has slowed melting and runoff. Precipitation in the form of snow and rain showers has been largely localized with no significant additional accumulations in the past month.

Runoff is essentially complete in the prairies as a result of the warm temperatures and limited snowpack. In the southern parkland the snowpack has sublimated and melted resulting in cultivated fields being 30-50 per cent bare. Consolidated drifts remain in sheltered areas and field water is present in some areas. Significant snow remains in the northern parkland and boreal transition zone (BTZ), particularly in the northeast parkland and east BTZ. Limited runoff has occurred in these areas. Similar conditions prevail in the Peace parkland where fields remain snow covered.

The March 2007 Alberta Environment water supply report provides a summary of the spring runoff predictions: above average to much above average runoff for the Cypress Hills, central and western aspen parkland, BTZ and southern Peace parkland. The southern prairie and northern Peace parkland are expected to have average to below average runoff. Runoff from mountain snowpacks to prairie irrigation districts is forecast to be below average to average in the Milk River and Oldman River basins and average to above average in Bow River and Red Deer basins.

Canada geese have been observed in most locales and mallards have been reported in the Brooks area.

In Saskatchewan snow conditions in the parklands are generally much better than in the prairies with some areas of the parklands receiving 150 per cent of normal snowfall. In the northwest part of the province, snow conditions are excellent and runoff is expected to be good to excellent in most areas. Approximately 1-2 feet of snow remains in the northcentral part of the province although there has been some melting in the past few weeks. Some of the hilltops are beginning to show and a few creeks are beginning to run. The parklands should experience considerable melting in the next few weeks as temperatures are predicted to be above freezing.

The abundant snow in the parklands is in stark contrast with the prairies where much drier conditions persist. In the southwest, there is no snow remaining and the area is expecting record high temperatures this week. The Missouri Coteau has also been dry and while the area did receive some snowfall over the past few weeks, most of it has melted and created very little runoff. Similar conditions exist in the southeast part of the province, with dry conditions and little runoff expected. Canada geese have been reported in most parts of the province along with a few ducks (mostly mallards and pintails) in the prairies.

Southwestern Manitoba received a significant snowfall at the beginning of the month and intermittent snowfalls have been common since. The region also received its first rainfall of the year last weekend. Overall, precipitation in most of southwestern Manitoba has been above average this winter. Snow accumulations generally increase north from the United States Border to Riding Mountain National Park.

Melting and refreezing have been favourable for a slow runoff and filling of wetland basins has followed. A recent dip in temperature has halted a strong melting trend of the previous week and fields still remain largely snow covered at this time. However, more southerly areas of Killarney and Deloraine are showing increased stages of melting with fields showing some exposed bare soil. Creeks have started to rise and wetlands have started to fill, but there is still a large amount of snow to melt. This is especially true in areas north of Brandon including Minnedosa and Shoal Lake where conditions are now excellent due to the recent wet weather.

There is some concern that the lack of frost seal and less than favourable soil moisture conditions will have negative effects on spring runoff. However, we are optimistic that the amount of accumulated precipitation this winter and the good remaining snowpack on the fields will compensate for the poor frost seal. Additional precipitation will still be needed this spring to compensate for the expected “thirsty soil” conditions after thawing.

The first Canada goose was observed in the region on March 10th and scattered reports of geese have been common since that time.

The **Western Boreal Forest** (WBF) has received average to above average amounts of snow in most locations this winter. Spring could still take awhile to arrive in the north, but spring habitat conditions, on average, are expected to be good.

In the Yukon, recent snow in Whitehorse and along the southern extent of the territory will continue to improve on already above average snow conditions. Conditions are good in the northern Yukon, but are below average in central portions of the territory. Spring habitat conditions should be particularly good in the southeastern corner of the territory. Due to the recent cold temperatures, the ground is frozen deeper than usual and will take longer than usual to thaw. When spring arrives the snow is likely to melt quickly - and because of the frozen ground, the water will probably flood in some areas. This should bode well for early spring habitat. Reports from weather stations in Whitehorse, Dawson City, Watson Lake, and Old Crow show current snow accumulations of 48cm, 47cm, 83cm, and 3cm, respectively. In the next three months the Yukon is expected to have below average temperatures, below average precipitation in the north, and average precipitation in the south.

Snow conditions in the Northwest Territories (NWT) are above average around Yellowknife and in the southwestern corner around the community of Trout Lake. Communities along the Mackenzie River (Inuvik, Norman Wells, Fort Simpson and Fort Good Hope) are reporting 60-85 per cent of their average precipitation amounts over the last 3 months. Norman Wells shows 30cm of snow accumulation, Inuvik – 39 cm, Yellowknife – 53 cm, Fort Simpson – 70 cm, and Fort Good Hope – 45 cm. Over the next 3 months the NWT expects below average temperatures, with average to below average precipitation.

Northeastern British Columbia continues to receive snowfall, with very high amounts around Fort St. John. Fort Nelson and Fort St. John are reporting 85 cm and 80 cm of snow – with more than 20 cm of snow accumulation in the last 30 days. Extreme precipitation in the higher elevations, and record wet in the northern interior should prove to make very good spring habitat conditions, which will improve the conditions in-and-around Fort Nelson, where they have experienced below average precipitation the past few seasons. Below average temperatures and above average precipitation are forecast over the next 3 months in the boreal portions of British Columbia.

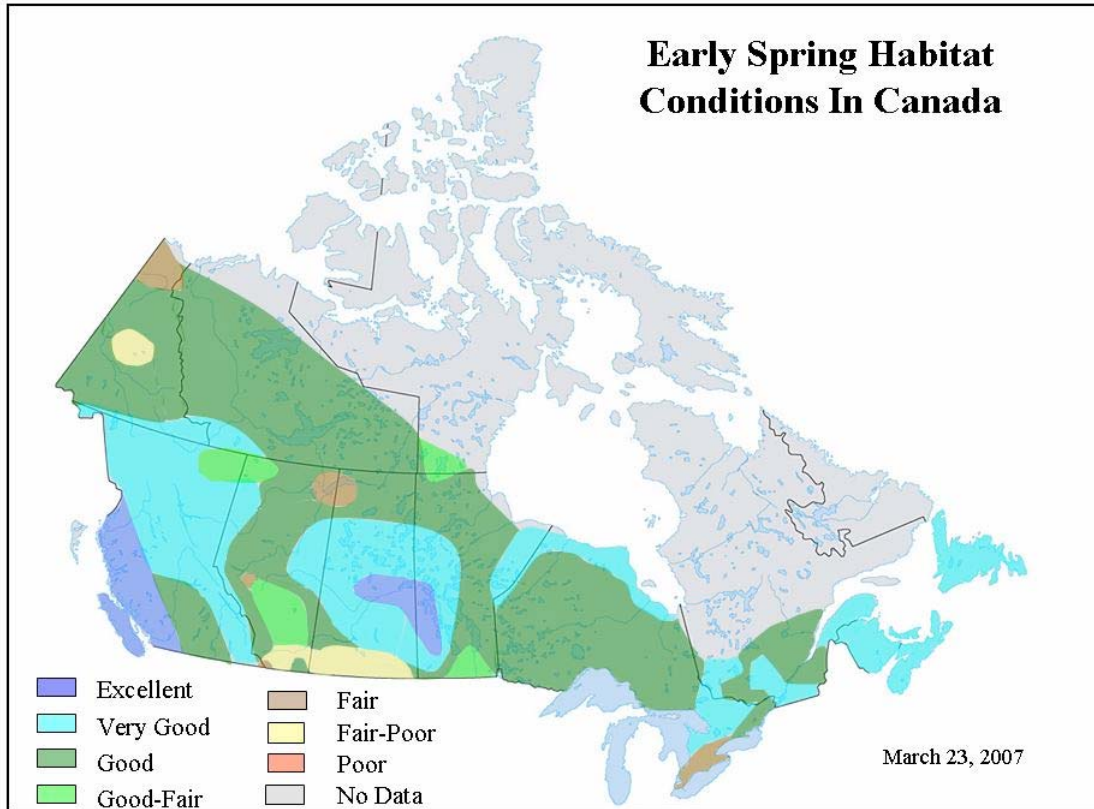
Levels of accumulated snow are very good in the northern regions of Saskatchewan and Manitoba with precipitation generally ranging from 115-200 per cent of average. Northern Alberta has varied conditions - below average in central locations like Slave Lake and Fort Vermillion, to average or above in Fort McMurray and the Peace region. The area surrounding Lake Athabasca in Alberta and Saskatchewan has received less precipitation than normal this winter (40-60 per cent). The boreal transition zone remains very strong with above average snow conditions. Spring habitat conditions around Cold Lake, La Ronge, Flin Flon, and The Pas should be particularly strong. Reports from weather stations in Elk Island National Park report 34 cm of snow accumulation, while Fort McMurray reports 49 cm, Red Earth – 49 cm, and Whitecourt – 47 cm. Buffalo Narrows, La Ronge, and Uranium City show snow accumulations of 59 cm, 55 cm, and

65 cm, respectively, while The Pas and Thompson report 48 cm and 66 cm, respectively. Below average temperatures are forecast for the next 3 months in northern Alberta, while boreal portions of Saskatchewan and Manitoba expect average temperatures. Northern Alberta and northern Saskatchewan are predicted to have above average precipitation, while average amounts of precipitation are expected in Manitoba. Canada geese arrived in the Edmonton area around March 9th.

Entering spring, habitat conditions remain good across **Ontario** despite a recent mild spell that has greatly reduced the snowpack. Southern Ontario is largely devoid of snow, with conditions continuing to grade from fair in the southwest to good in the southeast. Permanent wetlands are generally at full supply and are quickly becoming ice-free, but seasonal habitats are suffering from the shallow frost seal and will require timely rains in order to be available for returning waterfowl. The “snowbelt” areas of central Ontario are still locked in winter-like conditions due to previous lake-effect snow accumulations and as such, spring habitat prospects look very good. Rivers and creeks are beginning to open up, but wetlands and lakes remain ice covered. Conditions in northern Ontario continue to be in good shape despite a below average snowpack, with wetlands at capacity and still frozen. Waterfowl numbers are building along the lower Great Lakes from the St. Clair River to the eastern end of Lake Ontario while lone black duck pairs are beginning to appear on wetlands and creeks in the eastern part of the province.

After a spell of unseasonably warm weather, wintry conditions returned to **Quebec** in mid-February with average to below average temperatures. Southern Quebec recorded temperatures ranging from 3-4.3°C below average. Total precipitation remained below average in all regions except in the Eastern Townships and Gaspesie regions where they were 16 per cent and 33 per cent above average, respectively. Total precipitation has improved slightly and was closer to the monthly average especially in the Gaspesie and Quebec regions where they received 40 per cent and 20 per cent more snow. Two storms on March 2nd and March 17th brought the snowpack to approximately 60 per cent of average. Consequently, the layer of snow on the ground is well below normal in all regions. However, cold temperatures and snowfall since the beginning of March have improved the existing snowpack and projected spring habitat conditions remain good to very good throughout Quebec.

Migration is in full swing in **Atlantic Canada** and Canada geese returning to northern breeding grounds are abundant throughout the entire region. Recent warmer weather has increased the amount of open water in estuaries, rivers and wetlands providing excellent habitat for returning waterfowl. Snow accumulation over the entire region varied throughout the winter. Snowfall events were generally followed by warmer than usual weather preventing much accumulation. The winter of 2006-07 was similar to that of the previous year, temperatures are somewhat colder but snow cover over the entire region has been limited. Long range forecasts are calling for warm weather through the end of March into April and numbers of returning migratory waterfowl are expected to increase in the next couple of weeks. Habitat conditions over the entire region are very good.



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