Spring Habitat Conditions in Canada

Summary

Wetland conditions vary in British Columbia, where the usual breeding birds and migrants have been observed. Birds have begun to arrive in the territories, and swan numbers are particularly high in the Yukon. While conditions are still dry in Alberta, they have improved in Saskatchewan, and a storm event recently brought much needed moisture to both provinces. Precipitation has been below average in Manitoba, but still adequate to maintain favourable conditions for breeding and migrating waterfowl. Habitat conditions vary across Ontario, and Quebec has been dry and warm. In Atlantic Canada, lower than normal flood levels appear to be increasing feeding opportunities for some waterfowl.
British Columbia / Western Boreal Forest

BRITISH COLUMBIA

Several storms have brought wetter conditions to the coast, where temperatures have been near or slightly below normal this month. Snow packs have increased on Vancouver Island and in southern portions of the coast, but levels are still below normal in most low elevation areas. Wet conditions increased the water levels in local wetlands, and dabbling ducks are actively feeding to build up energy for the breeding season. Some resident waterfowl have initiated nests, and the first broods are starting to appear.

Precipitation levels continue to be relatively low in the central Interior, although temperatures were closer to seasonal norms for this month. Some of the smaller Chilcotin wetlands won't see water this year, and many won't have water for long. Despite the early start to spring, cool weather has kept ice on many higher elevation ponds, and pairing will likely start at the usual time. There are still swans and large migrant groups in the area.

Despite some recent precipitation and cooler temperatures, conditions are still dry in the southern Interior. Runoff was poor due to a lack of snow, and many wetlands have low levels. Breeding behaviour appears to be slightly earlier than usual. Conditions are very dry in the southeast Interior.

In the Peace region, although conditions improved marginally due to some precipitation in March, they are still poor overall and worse than last spring. The snow melted gradually, with most of it soaking into the ground rather than flowing into low-lying areas. Several projects are abnormally low, and some may dry up this year. Quite a few waterfowl species have been observed (mallards, common goldeneyes, Canada geese, pintails, trumpeter swans, snow geese), but not in large numbers.

WESTERN BOREAL FOREST

Spring is progressing in the Yukon, where most areas have average snow levels. Halfway through the month, Whitehorse is on par to receive normal precipitation for April. Over the next week, temperatures are predicted to be above 10 C, which should melt the snow quickly and open some smaller ponds. Birds have begun to arrive, and swan numbers are particularly high. In the first week of April, over 2,000 swans were observed at Swan Haven; which doesn’t normally occur until the third week of April.
In the Northwest Territories, Yellowknife is currently in line for normal precipitation for April, while Norman Wells has had below normal precipitation for the month. Few waterfowl have been reported, although a pair of goldeneyes was observed in Kakisa, where some mergansers appear to have overwintered.

Northern Alberta has had one of the driest winters on record. A recent snowfall/rain event will certainly help, but it won’t be enough. The northeast side of the province (centering on Fort McMurray) has received good precipitation amounts.

A storm event recently made its way through Alberta and Saskatchewan. It brought 30.4 mm of precipitation on April 13, which pushed precipitation levels to above normal for the month. La Ronge has had 16.4 mm of precipitation this month, which is close to normal for April. The sudden rainfall produced some minor, localized flooding, in addition to reinitiating runoff, which had been short. Various waterbirds have been observed, including mallards, swans, geese, pintails and scaups.

Birds are also returning to The Pas area of northern Manitoba, where mallards, goldeneyes, cranes and geese have all been observed. Wood ducks and common mergansers were also spotted near Mafeking. The majority of snow has now melted, with below average runoff. Halfway through the month, precipitation in The Pas area has been light, with only 4.4 mm received so far. Moisture is needed, or water levels will be below normal this year.

The Saskatchewan River started to break up at The Pas on April 9, although small residual ice flows are still present. Manitoba Water Stewardship reports that the crest on the river has been unusually low this year. There was good precipitation during the week of the April 11 in Saskatchewan and Alberta, which should help sustain flows on the river during the next few months.

Prairie Canada

Alberta

Conditions are still dry, and the Weather Network reports that the province: “is currently in the grip of its driest back-to-back years on record since the 1880's.” After a dry fall, winter (November 1, 2009 to March 31, 2010) precipitation was generally below average across the province, and less than 40% of normal in many areas.

Spring runoff from winter snow accumulations is essentially complete across the agricultural zone. Exceptions to the dry conditions occur in the southern Prairie. Landowners in the southeast (Cypress Hills area) are saying that this year’s runoff is the best they’ve seen in five years. Around Brooks, the snow melted early and fast, while the ground was still frozen, so much of it ended up in wetlands. These areas are rated as fair. Elsewhere, a protracted spring melt and a poor frost seal did not result in any appreciable recharge of wetlands, even in areas with average snow packs. Some deterioration of existing wetland water levels is anticipated, as ponds
become ice-free and frost leaves basins. Conditions are poor in the western portion of the Southern Prairie, Northern Prairie, Aspen Parkland, Boreal Transition Zone (BTZ) and Peace Parkland, which all experienced below average runoff.

On a positive note, the eastern BTZ received approximately 20 to 30 cm of snow in early April. Lesser amounts fell in the Aspen Parkland and Prairie. The snow was accompanied by high winds that drifted snow into wetlands, creeks and ditches, which may translate into improved wetland water levels. Another storm hit the province on April 13 and 14, but its impacts were largely confined to the southern Prairie and an area of the Northern Prairie and Aspen Parkland that runs along the Saskatchewan border. News reports indicate that 30+ cm of snow fell in some areas. High winds led to drifting into ditches, creeks, tree lines and wetlands. Precipitation amounts declined from east to west, with only traces recorded in the western Prairie and western Aspen Parkland. The snow will melt rapidly in the next few days, with temperatures reaching above 20 C. Some runoff and wetland habitat recharge is anticipated from melting drifts. However, due to extremely dry conditions through most of the province, significant additional moisture is required to have any appreciable effect on the wetland levels.

Pairs of Canada geese and mallards are establishing breeding territories on available wetlands. However, breeding effort is currently low in the Parkland, BTZ and Peace Parkland due to the general lack of moisture, low pond numbers, and continuing ice cover. American pintails, American wigeons, common goldeneyes, tundra swans and snow geese have been observed migrating into and through the Aspen Parkland. Ducks began moving into the Peace Parkland during the past week.

SASKATCHEWAN

Dry class IV wetland in Buffalo Lake area (Aspen Parkland), AB – early April

Near Wynyard, Saskatchewan – mid April

Wetland habitat conditions have improved across much of the province, due to a recent weather system that produced 25 to 100 mm of rain, as well as snow. The extreme southwest part of the province had over 30 cm of heavy wet snow. This additional moisture helped to fill many temporary wetlands, which had been rapidly drying.
Added moisture was much needed in the west central part of the province, where there were indications of drought prior to the recent storm. In the Thickwood Hills area, rain was widespread and was particularly heavy (over 76 mm) near Rosetown and Biggar. Heavy rains were also observed in the central Parklands, including Last Mountain Lake (over 100 mm) and Allan Hills (15 to 50 mm). In the east central part of the province, rainfall amounts were closer to 25 to 40 mm. Conditions remain dry in the southeast, because most of the moisture soaked into the ground with very little runoff. Wetlands in the Missouri Coteau remain fair, but recent rain has improved conditions slightly. Heavy snow in the southwest should help to further improve wetland conditions.

With temporary wetlands filling up and conditions improving on more permanent wetlands, this should help attract birds into the province. Pastures and hayfields should also benefit from the added moisture. Waterfowl have been arriving in the province since the beginning of April and there are now large numbers of ducks and geese being observed. Almost every duck species normally seen on the prairies has been observed, including mallards, pintails, northern shovelers, canvasbacks, and blue-winged teal. Large flocks of snow geese, as well as a few flocks of sandhill cranes, have also been observed. Overall, the outlook for breeding conditions in Saskatchewan is much brighter with the recent rain and snow.

**MANITOBA**

Above normal temperatures over the last month have resulted in an early, steady arrival of spring. The melt, and resulting runoff, have been gradual, with little to no flooding throughout the province. Waterways in southwest Manitoba crested in early April, but were well below normal levels.

Precipitation has been occasional this spring, but remains below average throughout the southwest breeding ranges. These rain events have been just enough to maintain the favourable wetland levels currently being experienced by breeding and migrating waterfowl in the three main pothole regions of Killarney, Virden and Minnedosa/Shoal Lake.

Winter wheat survival appears to be excellent across all ranges. Landowners anticipate an early start in the fields this year, to sow spring varieties.

Mallard arrival was first noted in late March, and pairs were common shortly after. Territorial flights of mallards are a common sight and lone drakes have been observed recently, which is a good sign of nest initiation. Canada goose nesting is well underway. Cackling geese and snow geese, as well as tundra swans, moved through quickly during these favourable migrating conditions, but can still be observed staging in large local concentrations. Canvasbacks are staging in significant concentrations on larger water bodies, and the first redheads, wigeons and blue-winged teals have been observed over the past two weeks.

A class one pond is still holding water in the Belmont area, Manitoba – early April.
Habitat conditions remain favourable in southwest Manitoba. This is primarily due to the superior wetland conditions of last fall, which were supported by winter and spring conditions. That being said, additional precipitation will be required to maintain these conditions for breeding waterfowl in the area.

**Eastern Region**

**ONTARIO**

Although spring-like weather arrived exceptionally early this year, typical spring rains have yet to materialize. As such, habitat conditions vary across the province. Temperatures have been well above normal since early March, which led to a very early melt and left both inland and coastal wetlands ice-free much earlier than normal. Waterfowl responded accordingly, by arriving well ahead of schedule along the lower Great Lakes. With the warm weather extending northward to Hudson Bay, migrants pushed through after only a short stopover.

Precipitation continues to be a valued commodity, as most of southern Ontario has received only 40 to 85% of normal amounts since mid March. This is significantly shortening the flooding duration for many seasonal habitats. Although the extreme southwest part of the province saw near normal rainfall during this same period, conditions there are also less than optimal for breeding waterfowl, because the rains were quickly absorbed into the dry soil and did little to recharge pairing habitats. Conditions continue to grade from poor in the southwest, where only isolated permanent wetlands remain adequately flooded, to good in the southeast, where a more favourable mix of seasonal, semi-permanent and permanent habitats is still available for locally breeding waterfowl. The abnormally warm weather has advanced both breeding chronology and plant phenology by 10 to 14 days. The first noticeable insect hatch was also much earlier than normal, which should bode well for nesting hens. Early field reports suggest that numbers of waterfowl pairs appear to be average to slightly above average in southeast Ontario, while numbers are down in the southwest, likely due to the lack of available habitat.

Conditions throughout northern Ontario remain drier than normal. With unseasonably warm temperatures, ice-out was substantially earlier than normal. Habitats throughout the region remain plentiful and in decent shape, considering the limited snow accumulations during the winter. Mild temperatures should give Mississippi Valley and Southern James Bay populations of Canada geese a jump on the breeding season.
QUÉBEC

The spring season definitely arrived early this year. Following the same pattern as the winter, March and April have been exceptionally dry and warm. Since the beginning of April, average temperatures have been higher than normal in all regions, with monthly averages ranging from 3 to 5°C.

As of mid April, total monthly precipitation has been below normal, except in the Eastern Townships region, which had close to normal levels. Snow precipitation was also poor for all regions, with only traces of snow falling. Due to a combination of poor precipitation and mild weather, spring runoff was poor this year and the mean St. Lawrence water level is roughly 20 cm below normal. Consequently, a good water supply was not observed in major watercourses and in temporary wetlands along the St. Lawrence River. Spring habitat conditions have been downgraded to fair for most of the province.

Canada geese and greater snow geese have been arriving for two weeks. Flocks of many species, including mallards, pintails and lesser scaups, are being reported from the St. Lawrence River.

ATLANTIC CANADA

Spring has sprung in Atlantic Canada, with several record-breaking warm days and less than normal precipitation. Nearly all snow has melted, even in northern areas. The relative water equivalency is down remarkably from the past two years and notably from long-term averages. The water equivalency feeding the St. John River below the Mactaquac dam is approximately 3 mm, compared with a long-term average of 100 mm and last year’s average of 144 mm. Less snow cover and early summer-like weather has resulted in a drier than normal spring. The St. John River didn’t even reach its full supply level this spring.

As a result of lower than normal flood levels, there seem to be even more waterfowl feeding areas available. Many areas that are historically under several feet of water during this period are currently only shallowly flooded. This offers bottom-feeding opportunities in areas that are often not accessible and has resulted in a relocation trend. Many areas that typically see higher concentrations of migrants are considerably quieter, while congregations take advantage of new fertile feeding zones.
All rivers and wetlands are completely open now. Common goldeneyes have started to pair up on the upper St. John River, which is much earlier than usual. Reports of teal arrivals and mallard and goose nesting also confirm how ahead of schedule the birds are this year.

This year’s lower than normal freshet volume has not negatively affected floodplain impoundments, which will continue to operate at normal spring water levels. The shallow flood has drawn migrant waterfowl to new areas, while offering great foraging opportunities. Overall, habitat conditions are good in Atlantic Canada.