



Throughout North America, billions of birds, comprising more than 350 species, migrate thousands of kilometers each year in the spring and autumn. Some species, like the Arctic Tern, can travel as far as 80,000 kilometers, when making a roundtrip between their Arctic breeding grounds and Antarctic wintering grounds. These long journeys, however, pose serious risks for the birds. They face predation, starvation, and severe weather events. Yet, the risks are worth the reward of plentiful food supply, safe breeding grounds and secure wintering grounds. Alberta hosts 8 million migrant waterfowls each year that travel thousands of kilometers to breed and feast on the plentiful food supplies found all over the province. This transaction between migratory risk and reward, however, is much trickier than it appears. One single variable, i.e., timing, can turn the hard-earned bargain into a complete failure. Birds must arrive at the right time to harvest and maximize the resources, i.e., not too late as to lose their food supply and nesting ground to other birds, yet not too early in order to avoid cold weather and starvation due to low food supply. Over thousands of years, evolution has synchronized birds' migration with the peak in the availability of food and habitat resources at their migratory destinations. Climate change, however, has started to impact this synchrony. In this blog we will explore the impacts of climate change on bird phenology by focusing on the latest research on Mountain Bluebirds published by the Ellis Bird Farm and the Beaverhill Bird Observatory.

===== Mountain Bluebird 101 =====

Mountain Bluebirds are a medium size, short-distance migrant found in western North America. Their arrival often indicates the beginning of spring, including in Alberta. In early spring, Bluebirds migrate from their wintering grounds in the southwestern United States and central Mexico to their northern breeding grounds that extend from Alaska to western Canada and United States. In their breeding range they occupy grassland habitat and prefer to eat beetles, grasshoppers, and caterpillars while nesting in man-made bird boxes or cavities in trees left behind by woodpeckers.

Additional Readings

Myrna Pearman, Leo De Groot, Geoffrey I. Holroyd, and Stephanie Thunberg. Earlier Spring Arrival of the Mountain Bluebird in Central Alberta, Canada. *accepted 19 December, 2019*

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