DOI: https://doi.org/10.54393/mjz.v6i2.169



# MARKHOR THE JOURNAL OF ZOOLOGY

https://www.markhorjournal.com/index.php/mjz ISSN (E): 2790-4385, (P): 2790-4377 Volume 6, Issue 2 (April-June 2025)



# How Climate Change is Affecting Migration of Birds



## Naz Fatima<sup>1</sup>

<sup>1</sup>Department of Zoology, University of Central Punjab, Lahore Pakistan nazfatima.pu@gmail.com

### ARTICLE INFO

#### How to Cite:

Fatima, N. (2025). How Climate Change is Affecting Migration of Birds: Climate Change is Affecting Migration of Birds. MARKHOR (The Journal of Zoology), 6(2), 01. https://doi.org/10.54393/mjz.v6i2.169

The climate on earth is changing drastically. Some birds adapt to changing climate patterns while others are on the verge of extinction. Migratory birds provide food to other wildlife and help in controlling pests and pollinating birds. The climate change and global warming we are experiencing is human induced, which makes it difficult to cope up for the birds. Other than global warming, pollution, increasing population, depletion of natural resources, sea level shifts, lower water tables, higher draught frequency, all collectively impact habitat destruction which affect migration of birds. Short distance migratory birds are less affected by changing climate patterns, while long distance birds are struggling to keep up with their migration rhythm.

During migration, birds need to refuel to continue their long journey. Habitat loss because of increasing temperatures causes flooding, drought, or desertification. Change in topography of landscape can affect migration route and food resources and can make bird feel exhausted at the end of the journey. Extreme weathers and intense storms can kill birds during migration due to thermals, and water and food scarcity.

Migratory birds use coastal wetlands as resting area and for foraging. Climate change in Sahel region is an example of loss of habitat and resulted in desertification and depletion of resources. This also affected rainfall and made the climate worse for migratory birds. Similarly, Sahara expansion and habitat loss has made it difficult for African Eurasian migratory birds to cross Sahara region because of no possibility of resting. Climate change is also affecting vegetation structure of Siberian region. The rise in temperature has caused forest expansion in the region to Tundra. Researchers have reported that forest expansion in Siberian region has caused loss of breeding habitat for more than 90% species of arctic goose.

The climate change is disturbing ecological balance. Some migratory birds cancel their journey and prefer to stay in their breeding places because of inhospitable stop over sites or changed weather pattern. This also affects food web for other animals and insects. Actions should be taken for successful breeding and survival of these birds. To fight climate change, more awareness should be given to reduce pollution and carbon emissions. Government should also take important steps to reduce the energy use and develop more sustainable future to conserve migratory birds and their habitat. Bird conservation programs should establish and protect migratory areas for birds. Migratory bird species and all other species on planet earth should be protected. This is the only they will perish.