

Introduction to North American Raptor Conservation Species Assessments

In the assessments, we provide a summary of the continental and regional migration count trends through 2023 for each species using data from 80 migration count sites across North America, spanning from Canada to Mexico. For complete and/or long-distance migrants such as Osprey, Broad-winged Hawk, Swainson's Hawk, and Mississippi Kite, where essentially the entire population migrates out of its breeding range to a separate wintering range, the migration count trends provide a reliable assessment of actual population trends. For partial and short-distance migrants such as the Red-tailed Hawk, there is evidence that some species may be shifting their migratory behavior or wintering ranges in response to climate change and other factors (Bolgiano, 2013; Paprocki, et al, 2017). Our goal is to provide accurate population trend summaries and highlight species of concern.

Another factor to consider in viewing the trends is that other species (e.g., Golden Eagle, Peregrine Falcon) have resident populations that may not be well-represented in the migration count data. Therefore, it is important to review results from multiple datasets, including the Christmas Bird Count (CBC, <https://netapp.audubon.org/cbcobservation/>) and Breeding Bird Survey (BBS, <https://www.pwrc.usgs.gov/bbs/results/>), for a complete picture of the population status of many raptor species. In these assessments, we also briefly discuss CBC trends where those data augment the findings from the migration count results. The results discussed here derive from www.audubon.org and were published in Soykan, C.U., Sauer, J., Schuetz, J.G., LeBaron, G.S., Dale, K., and Langham, G.M. 2016. *Population trends for North American winter birds based on hierarchical models. Ecosphere*, 7(5). The CBC data represented here only show trends where the confidence interval for the trend derived does not include zero.

Mississippi Kite (*Ictinia mississippiensis*)

The 10-year migration count trends for Mississippi Kites suggest stable or increasing populations across its range in the East and Gulf Regions as 57.1% of 7 total sites recorded stable counts during this span and 3 sites showing an increase (42.8%). There were no decreases observed (see pie charts and trend maps below). This is similar to the 20-year count trends, which demonstrated a stable and increasing population in the Gulf Region (Gulf Region: 2 stable, 3 increase). The largest average counts are recorded in Mexico and Central America, with more than 600,000 recorded at the two Veracruz count sites in 2025.

The Mississippi Kite overwinters in South America, so it is not detected during Christmas Bird Counts in the winter; however, the USGS Breeding Bird Survey data suggest an increase in nesting populations during the last two decades. Similarly, eBird data indicates an increase in abundance for this species with an



increase of 18.4% between 2012-2022. The species is currently listed globally as a *Species of Least Concern* by the IUCN Red List. Although it is listed as endangered in Tennessee, Illinois, New Mexico, and listed as threatened in Arizona, Mississippi Kites appear to be increasing northward with birds nesting in some new areas north of their prior range.

Mississippi Kites are vulnerable to deforestation and the removal of nesting trees. Removal and fragmentation of mature hardwood forests can threaten Eastern populations. The increase in the breeding population is likely due to the ability of this species to readily colonize suburban areas and nest in urban environments, as observed in the Great Plains, and possibly climate change, allowing range expansion. Human-raptor conflict due to their diving behavior near nest sites has been recorded as a significant wildlife nuisance in Kansas, New Mexico, Oklahoma, and Texas, but steps have been taken to mitigate negative interaction through education and outreach.



