

Introduction to North American Raptor Conservation Species Assessments

We provide species assessments based on trend analyses through 2019 from 76 raptor migration count sites across North America spanning from Canada to Panama. Synthesis of trends at the continental and regional scales can highlight species and/or regions that warrant a closer look in the case of widespread declines or highlight conservation successes in the case of widespread increases. It is important to note that the intent of long-term monitoring efforts like RPI is to identify changes overtime, not necessarily to explain them—that is where focused research efforts come into play. RPI shines a light on species and places in need of closer looks and focused efforts.

In these assessments, we provide a summary of the continental and regional migration count trends for each species and highlight species of concern. 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 and/or wintering ranges in response to climate change and other factors (Bolgiano, 2013; Paprocki, et al, 2017).

Another factor to consider in viewing the trends is that some species (e.g., Golden Eagle, Peregrine Falcon) have resident populations that may not be well-represented in the migration count data. Therefore, considering 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/>), can provide a more complete picture of the population status of many raptor species. In these assessments, we also briefly examine CBC trends, especially where those data inform 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)*.

Gray Hawk (*Buteo plagiatus*)

The 10-year migration count trends for the Gray Hawk suggest stable populations as signaled by the two fall count sites in Veracruz, Mexico. Cardel recorded the highest average count of 2,072 individuals, which was a statistically significant stable count. Twenty-year count trends suggested stable and increased fall counts (Gulf Region: 1 stable, 1 increase). The Gray Hawk is a Species of Least Concern, designated by IUCN red list, however, it is listed as a Species of Concern by the U.S. Fish and Wildlife Service and by the state of Arizona. It is listed as Threatened in Texas. In Mexico it is listed as “Subject to Special Protection”. Shooting and trapping remains a threat in the non-United States portion of its range, as multiple banded individuals have been recovered after being shot. Habitat loss due to wood cutting and overgrazing is a primary concern and has altered its distribution in Texas and Arizona. Ground water depletion has also resulted in withdrawal of the species from areas that were historically populated.

