

## 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](http://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)*.

### Bald Eagle (*Haliaeetus leucocephalus*)

The 10-year migration count trends for the Bald Eagle suggest a mix of increasing and stable population across North America with 56% of sites showing significant increases in counts and 43% of the sites reported stable counts (no statistically supported increase or decrease) during this span. Regional populations observed a mix of increasing and stable counts in the East, increasing population in the Central Region, and stable or increasing population in the West and Gulf (see pie charts and trend maps below). 20-year count trends (not shown) similarly show increased counts (East Region: 3 stable, 22 increase; Central Region: 2 increase; West Region: 2 stable, 2 increase, 1 decrease; Gulf Region: 1 increase). Hawk



Photo by Bill Moses

Ridge, Minnesota, has the highest average count of bald eagles for the 10-year period, 5,190, and has showed a continued increase in recent counts.

Winter survey data from the Christmas Bird Count (CBC) confirm an increasing 10-year trend continent-wide with the annual percent change in population reported to be an increase of almost 4%. The Bald Eagle is listed as a species of Least Concern by the IUCN Red List throughout its range, but it is still vulnerable to threats such as energy development, nest disturbance, lead poisoning, disease, and electrocution.



