

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)*.

Cooper’s Hawk (*Accipiter cooperii*)

The 10-year migration count trends for Cooper’s Hawks suggest mostly stable populations across North America with 73% of 75 total sites showing stable counts during this span. There also have been decreasing observations at 24% of North American sites, and only 3% of sites showing an increase. Regionally, populations are mostly stable with some decreasing reports in the Central and East Regions. Two of the five sites showed declines in the Central Region or 33%, whereas 29% of 55 sites in the East showed declines. The West and Gulf Regions have not reported any declines (see pie charts and trend maps below). Twenty-year count trends (not shown) also reflect a mostly stable population except for the Gulf Region which had observed only decreases over this span (Central Region: 2 decrease; East Region: 13 stable, 2 increase, 8 decrease; Gulf Region: 5 stable;



West Region: 5 stable, 1 decrease). Declines may suggest changes in migration behavior or declines in some sub-regions, but further research is needed to understand these patterns. Cape May, New Jersey recorded the highest average count for Cooper’s Hawk at 3,826, reported stable counts. Goshutes, Nevada, which averages 2,527 Cooper’s hawks per year, also reported stable counts.

Winter survey data from the Christmas Bird Count (CBC) show slightly increasing 10-year trends continent-wide with the annual percent change in population reported to be an increase of 2%. The Cooper’s Hawk is a species of least concern and has readily recovered from widespread North American raptor declines during the previous century, which is likely due to its ability to exploit human-altered landscapes. Some localized threats include contaminants, disease, and shooting.



