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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, <u>https://netapp.audubon.org/cbcobservation/</u>) and Breeding Bird Survey (BBS, <u>https://www.pwrc.usgs.gov/bbs/results/</u>), 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 <u>www.audubon.org</u> 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).

White-tailed Hawk (Geranoaetus albicaudatus)

The 10-year migration count trends for White-tailed Hawks suggest stable populations as signaled by the one count site in the Gulf Region that recorded an average of 2,122 individuals in Corpus Christy, Texas. This count was statistically significantly stable during this span. Twenty-year count

trends also reflect a stable population (Gulf Region: 2 stable). Winter survey data from the Christmas Bird Count (CBC) show increased 10-year trends within the Texas survey area with the annual percent change in population reported to be an increase of 3%. The White-tailed Hawk is a species of Least Concern, designated by IUCN red list. The species is vulnerable to removal or overgrazing of its nesting habitat because it requires shrubs or succulent vegetation for successful nesting. Human disturbance or persecution may also reduce nest success.

