

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)*.

Ferruginous Hawk (*Buteo regalis*)

The 10-year migration count trends for Ferruginous Hawks suggest stable populations across its range as the autumn count site in Goshutes, Nevada reported statistically significant stable counts during this span. Twenty-year count trends also reflect a stable population (West Region: 1 stable). Winter survey data from the Christmas Bird Count (CBC) show stable 10-year trends range-wide with the annual percent change in population reported to be an increase of 1%. The Ferruginous Hawk is a species of Least Concern, designated by IUCN red list. It has been locally designated with varying sensitivity throughout its range, which is concentrated in the Western United States, Northern Mexico, and Southwestern Canada. Ferruginous Hawks were designated nationally threatened in Canada in 2010. Since 2016, the species was listed as a Tier II or I species of

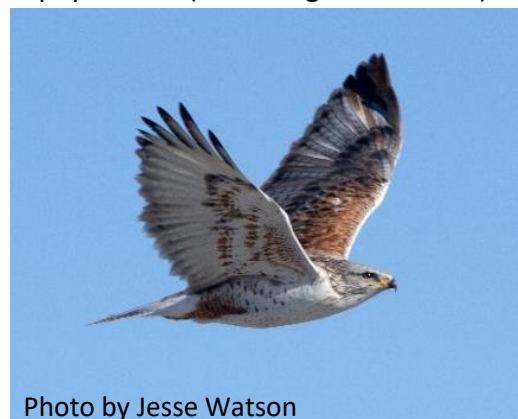


Photo by Jesse Watson

D. Oleyar, D. Ethier, L. Goodrich, D. Brandes, R. Smith, J. Brown, and J. Sodergren. 2021. *The Raptor Population Index: 2019 Analyses and Assessments*. Available at <http://rpi-project.org/2019/assessments2019.php>

greatest concern in 12 states. It is ranked by NatureServe as secure, uncommon, but not rare.

Ferruginous Hawks are at high risk of population declines due to wind energy. The species has also been shown to be sensitive to urbanization, collisions with vehicles, rodenticides, and lead poisoning.