M. Carson, D. Oleyar, D. Ethier, L. Goodrich, D. Brandes, J. Brown, and J. Sodergren. 2025. The Raptor Population Index: 2023 Species Assessments. Available at http://rpi-project.org/2023/assessments2023.php

Introduction to North American Raptor Conservation Species Assessments

In the assessments, we provide a summary of the continental and regional migration count trends through 2023 for each species using data from 80 migration count sites across North America, spanning from Canada to Mexico. 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 or wintering ranges in response to climate change and other factors (Bolgiano, 2013; Paprocki, et al, 2017). Our goal is to provide accurate population trend summaries and highlight species of concern.

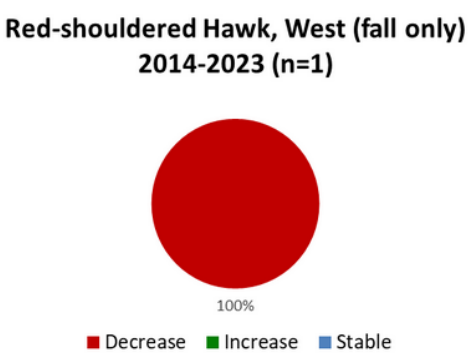
Another factor to consider in viewing the trends is that other species (e.g., Golden Eagle, Peregrine Falcon) have resident populations that may not be well-represented in the migration count data. Therefore, it is important to review results from multiple datasets, including the Christmas Bird Count (CBC, https://netapp.audubon.org/cbcobservation/) and Breeding Bird Survey (BBS, https://www.pwrc.usgs.gov/bbs/results/), for a complete picture of the population status of many raptor species. In these assessments, we also briefly discuss CBC trends where those data augment 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).* The CBC data represented here only show trends where the confidence interval for the trend derived does not include zero.

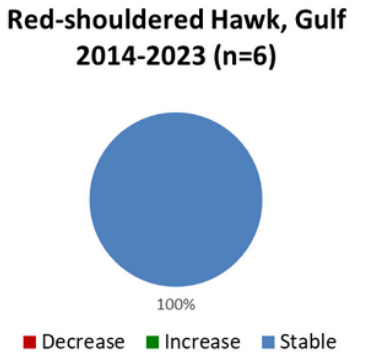
Red-shouldered Hawk (*Buteo lineatus*)

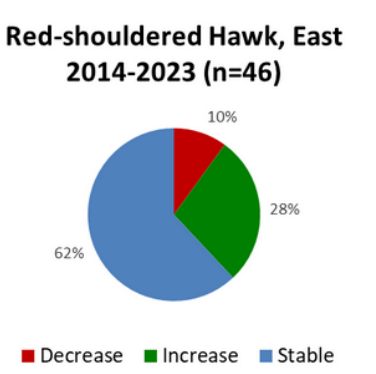
The 10-year migration count trends for the Red-shouldered Hawk suggest mostly stable populations across North America as 61.7% of 60 total sites recorded stable counts during this span. There have been decreased observations at 10% of the sites and 28.3% of sites have reported an increase. Regional populations show mostly stable trends, with 100% of sites in the Gulf region documenting stable counts, 62% of sites in the Eastern region documenting stable counts, and 50% of sites in the Central region documenting stable counts. The Western region documented decreasing counts, however, only one site's data was factored into this analysis. Additional count sites within the species range would help expand our understanding of its status in the Western region.

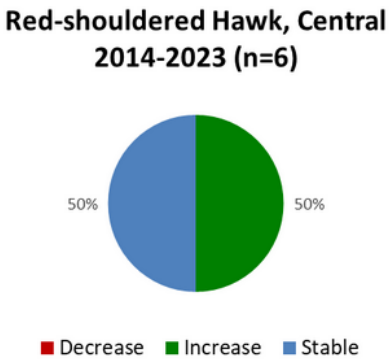
10-year abundance data from eBird documents a median population increase of 34% for this species over the 2012-2022 time span. These data document increasing trends across the range of

this species, with the highest increases seen in the southeastern United States. The Red-shouldered Hawk is listed as a *Species of Least Concern* by the IUCN Red List, but human disturbances have been observed to impact their presence in some localized areas. The species benefits from large areas of contiguous bottomland forest, wetland preservation, and the minimization of human disturbances. In southern populations, Red-shouldered Hawks adapt well to suburban neighborhoods using mature trees for nesting and appear to be expanding their nesting range in mid-Atlantic and Northeastern regions.









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