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.

Turkey Vulture (*Cathartes aura*)

The 10-year migration count trends for Turkey Vultures suggested mostly increasing populations across North America as 52% of sites recorded increased counts during this span. Stable counts were detected at 32.8% of the sites while 15% of sites showed declines. Populations are mostly stable in all North American regions, particularly the Northeastern states and provinces. The Eastern Region has observed the greatest increases as 55% of sites observed increased counts (see pie charts and trend maps below). This is consistent with historic count data with increases particularly in northern sites. Twenty-year count trends (not shown) reflect a stable population in most regions except for the East Region which observed increases at most sites during this span. Increases in counts are likely reflecting the northward expansion in the nesting range of Turkey Vultures, recently expanding into Canada. Declines were noted for a third of counts sites in Gulf and Central regions which bears further scrutiny.

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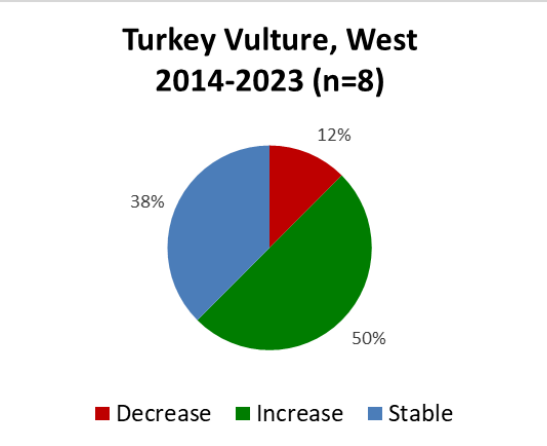
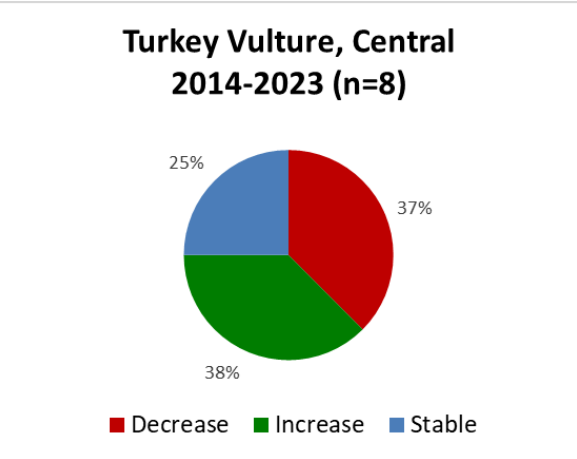
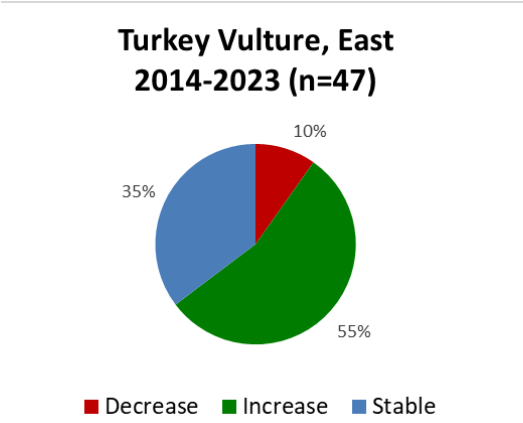
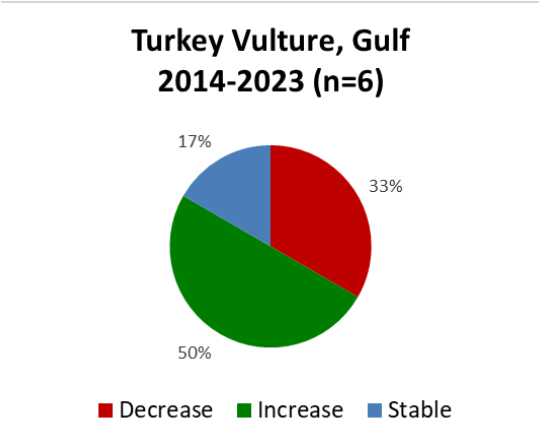
Winter survey data from the Christmas Bird Count (CBC) show increasing trends continent-wide with an annual percent change in population of 3.33% between 2009-2022. Additionally, 10-year abundance data from eBird reports an increase in Turkey Vulture populations range-wide, with a median increase of 12.2% from 2012-2022. The Turkey Vulture is designated as a *Species of Least Concern* by the IUCN Red List, and as obligate scavengers, they perform valuable ecosystem services for humans through carcass disposal and disease prevention. Turkey Vultures are sensitive to nest disturbance, changes in habitat, and environmental contaminants. They benefit from traditional farming practices as well as human alteration of natural habitats, taking advantage of road kills and dumps.


Turkey Vulture, West
2014-2023 (n=8)
12%
38%
50%
Decrease
Increase
Stable


Turkey Vulture, Central
2014-2023 (n=8)
25%
37%
38%
Decrease
Increase
Stable


Turkey Vulture, East
2014-2023 (n=47)
10%
35%
55%
Decrease
Increase
Stable


Turkey Vulture, Gulf
2014-2023 (n=6)
17%
33%
50%
Decrease
Increase
Stable

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