

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)*.

Prairie Falcon (*Falco mexicanus*)

The 10-year migration count trends for Prairie Falcon suggest stable and increasing populations across its range as three of the four count sites in the West reported stable counts and one reported increased counts (see pie charts and trend maps below). Manzanos, New Mexico, reported the highest average yearly count at 2,867 individuals, which was stable. Twenty-year count trends (not shown) also reflect a stable population (West Region: 3 stable, 1 decrease). Winter survey data from the Christmas Bird Count (CBC) show mostly stable 10-year trends range-wide with the annual percent change in population reported to be 0.67%. However, British Columbia reported an almost 3% decrease in CBC observations during the same span. The Prairie Falcon is a species of Least Concern, designated by IUCN red list. The species is vulnerable to habitat loss in nesting areas because the

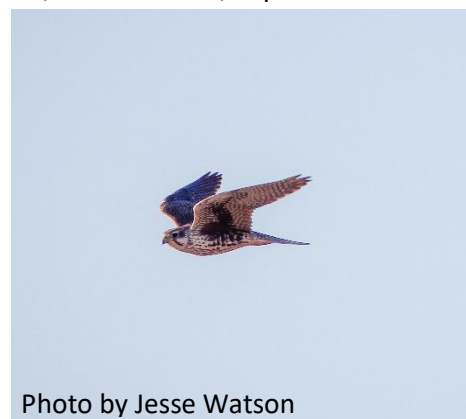


Photo by Jesse Watson

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>

number of cliff nesting sites is finite and nonrenewable. It is also vulnerable to human disturbances at nesting sites and loss of prey availability due to agricultural practices. Efforts to reintroduce this species to areas of Alberta and California where it had been extirpated were made in the last 20th century.

