

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.

American Goshawk (*Astur atricapillus*)

The 10-year North American migration count trends for the American Goshawk suggests widespread population declines occurred across the continent as 73.5% of 34 total migration sites recorded a decline over the past decade. The other 26.4% of the count sites recorded stable counts and no sites showed increasing counts. The majority of the declines have been observed in the East, with 82% of Eastern sites reporting declines (see pie charts and trend maps below). These data are consistent with the 20-year count trends,

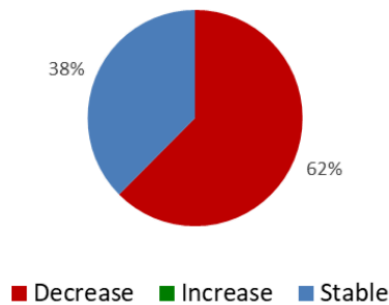
which reflect significant declines in the East over this longer span. The Central and West Regions have observed both declining and stable counts during the last 20 years. Hawk Ridge, Minnesota, which has the highest average count of Goshawks, 206, showed a 7.6% decline in goshawks per year during the past twenty years. The approximately 10-yr irruptive pattern in the Goshawk data from the 1970s through early 2000s at Hawk Ridge and Hawk Mountain has all but disappeared.



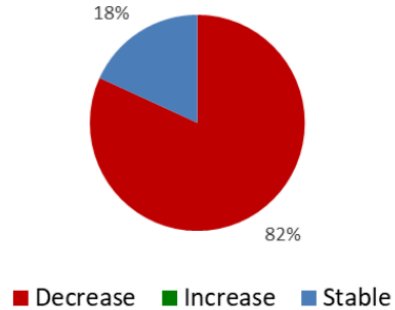
The American Goshawk is a Species of Least Concern on the global IUCN Red List, but it is listed as a sensitive species by the U.S. Forest Service in the Pacific Southwest, Southwest, Intermountain, Rocky Mountains, and Alaska Regions. Currently, there are no designations for this species in the Northern, Eastern, and Pacific Northwest regions, but some states have designated it as a Sensitive Species warranting more investigation and some eastern states list it as threatened or endangered. This species is listed as threatened in Mexico.

Research is required to determine the cause of widespread observed declines and shift from the former irruptive pattern of migratory movements. American Goshawks rely on large mature forests and may be vulnerable to nest disturbance, nest predation, environmental contaminants, habitat loss, climate change, and new diseases such as West Nile Virus.

**American Goshawk, West (fall only)
2014-2023 (n=8)**



**American Goshawk, East
2014-2023 (n=19)**



**American Goshawk, Central
2014-2023 (n=4)**

