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).*

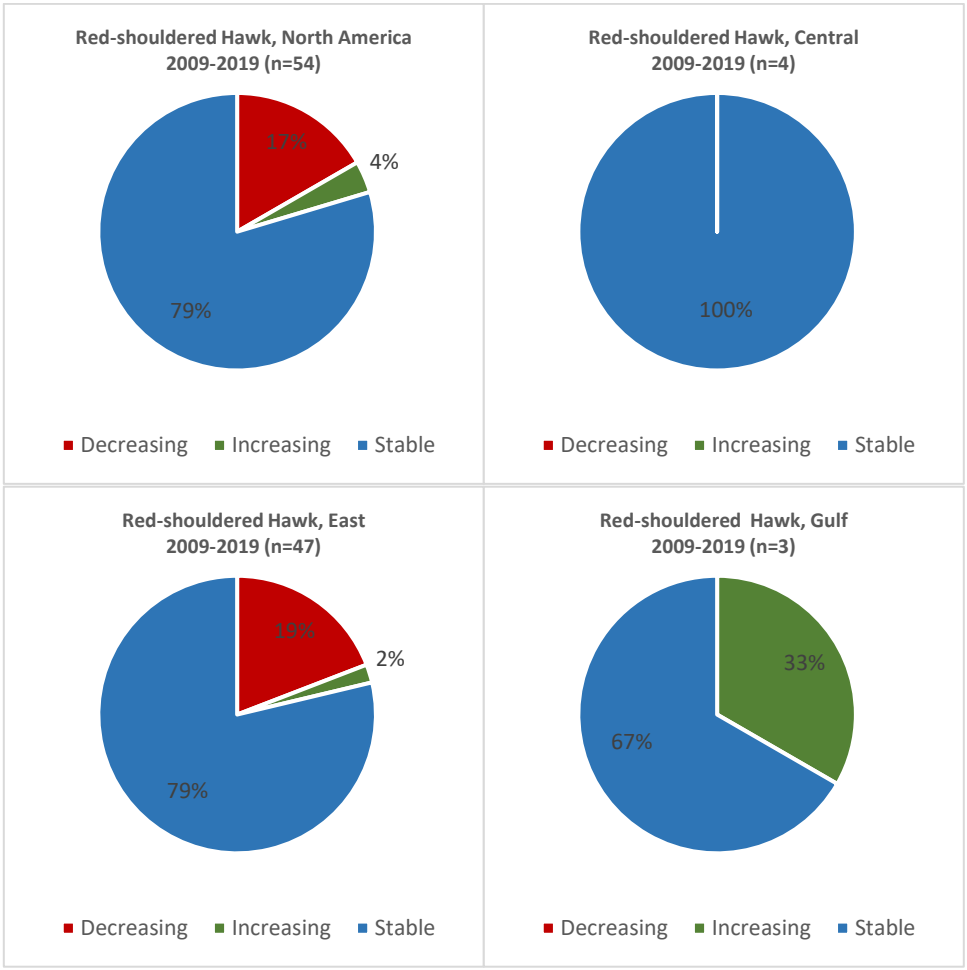
Red-shouldered Hawk (*Buteo lineatus*)

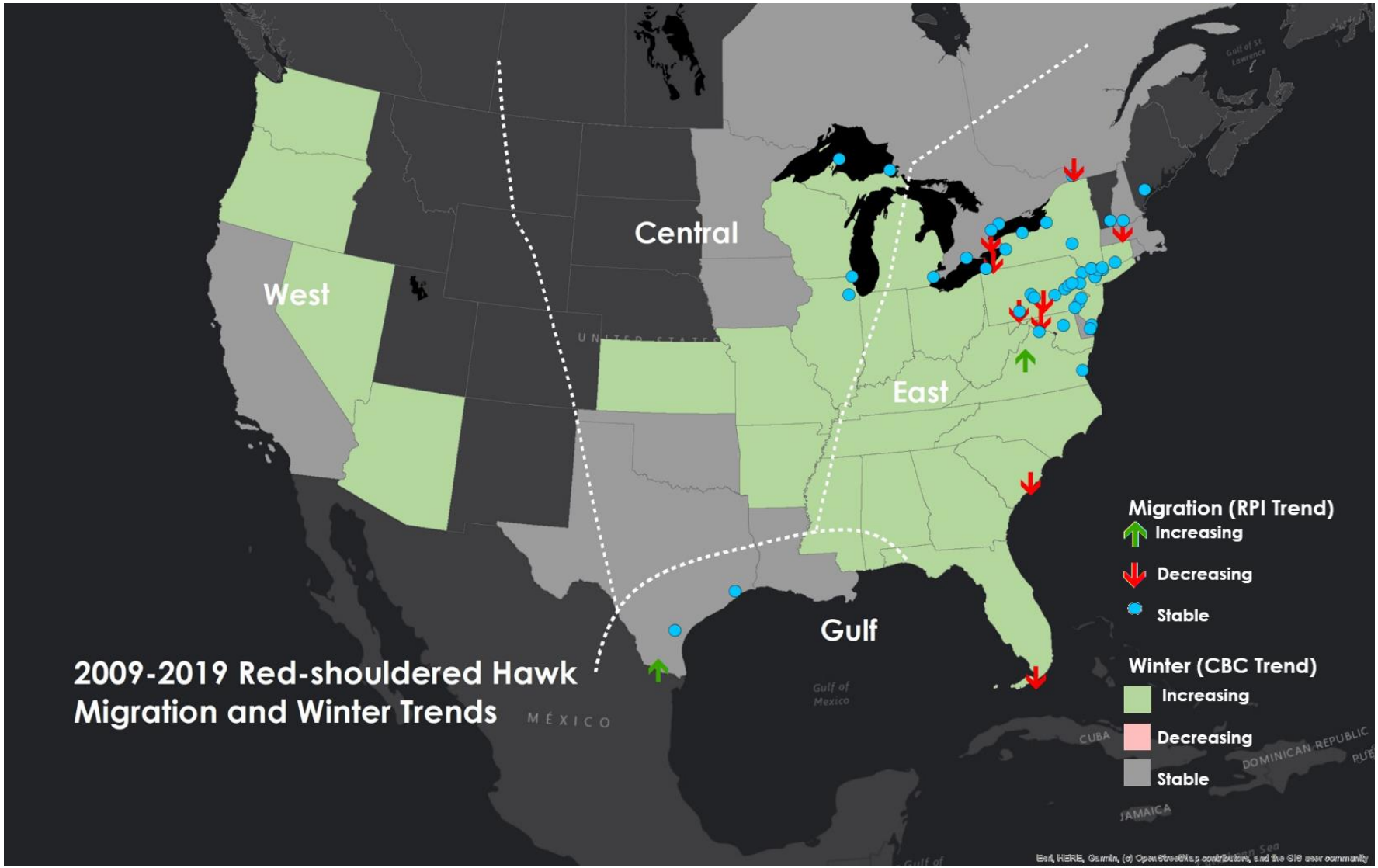
The 10-year migration count trends for Red-shouldered Hawks suggest mostly stable populations across North America with 79% of 54 total sites showing stable counts during this span. There have been decreasing observations at 17% of the sites and 4% of sites have reported an increase. Regional populations appear mostly stable with 19% of sites showing decreasing counts in the East Region. The Gulf Region has observed 33% increasing trends (see pie charts and trend maps below). 20-year count trends (not shown) also reflect a mostly stable population, although there have been some decreased counts reported in the East over this span (Central Region: 1 stable; East Region: 12 stable, 1 increase, 8 decrease; Gulf Region: 1 stable, 1 increase, 1 decrease). The highest counts of Red-shouldered Hawk occur along the Great Lakes at


Photo by Bill Moses

Holiday Beach and Hawk Cliff, Ontario, counting 637 and 607 on average per year. Both sites show stable numbers.

Winter survey data from the Christmas Bird Count (CBC) show slightly increasing 10-year trends continent-wide with the annual percent change in population reported to be an increase of 2.5%. Most regions show stable or increasing trends in winter with a possible slight decline in Ontario. Declining migration counts in this species may suggest a change in migration behavior, such as short-stopping. 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.




Central
West
East
Gulf
2009-2019 Red-shouldered Hawk
Migration and Winter Trends
MÉXICO
Gulf of Mexico
CUBA
DOMINICAN REPUBLIC
JAMAICA
Migration (RPI Trend)
Increasing
Decreasing
Stable
Winter (CBC Trend)
Increasing
Decreasing
Stable