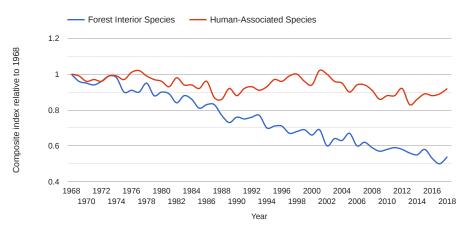
# PUGET SOUND

### INDICATOR ABUNDANCE OF TERRESTRIAL BIRD POPULATIONS

The terrestrial bird population abundance indicator measures the change in forest interior and humanassociated terrestrial bird populations that reside most, if not all, of the year in the Puget Sound basin. Population abundance and trends is based on Puget Sound survey data from the North American Breeding Bird Survey.







Composite index of human-associated species (n = 5) and forest interior species (n = 3) relative to the first survey year of 1968. The graph displays how the abundance of the collective group of human-associated and forest interior species deviated from the abundance observed in 1968. A growing population is indicated by values greater than 1.0 and a declining population is indicated by values less than 1.0.

# **Key Vital Sign Indicator Results**

- Despite some year-to-year variability, the breeding population abundance of resident bird species associated with interior conifer forests has steadily declined since 1968, the baseline year. Forest interior indicator species include: golden-crowned kinglet, varied thrush and brown creeper.
- Forest interior birds select large patches of conifer forests for breeding and are sensitive to the loss or fragmentation of forest patches resulting from urban development or other disturbances that clear forests. The progress of the terrestrial bird population abundance indicator is "Getting Worse" as forest interior species in Puget Sound steadily declined over the last 50 years.
- The declining trend in forest interior species abundance is primarily driven by declines in the most abundant of the three species, the golden-crowned kinglet. In contrast, the brown creeper, is increasing (see the Interpretation of Results section).
- Breeding abundance of the human-associated bird species has at times been lower than (1980-1995 and 2005-2018) or similar to (1995-2005) the population abundance observed in 1968. Human-associated indicator species include: American crow, rock pigeon, house sparrow, house finch, and European starling.
- Most of the human-associated species have populations that have remained stable over the study period. However, house sparrow abundances are increasing.



#### Target

No targets are currently set for this indicator.

#### **Data Source**

North American Breeding Bird Survey (BBS)

#### **Indicator Lead**

Scott Pearson Scott.Pearson@dfw.wa.gov Washington Department of Fish and Wildlife

#### Last Updated

05/25/2021

## **CONTRIBUTING PARTNERS**



TO LEARN MORE ABOUT THE VITAL SIGNS VISIT: vitalsigns.pugetsoundinfo.wa.gov OR CONTACT: vitalsigns@psp.wa.gov