

Townsend's Warbler

Setophaga townsendi

Class: Aves

Order: Passeriformes

Review Status: Peer-reviewed

Version Date: 24 June 2020

Note: Previously known as *Dendroica townsendi*.

Conservation Status

Table 1 Conservation status according to state, national, and international organizations and agencies.

Organization	Rank
NatureServe	G5/S4B
ADF&G	Species of Greatest Conservation Need
IUCN	Least Concern
BLM	Watch

Final Rank

Conservation Category: **VII. Yellow**

Low status and either high biological vulnerability or high action need

Table 2 ASRS categorical scores. Higher numerical scores denote greater concern.

Category	Range	Score
Status	-20 to 20	-6
Biological	-50 to 50	-30
Action	-40 to 40	4

Status

Variables measure the trend in a taxon's population status or distribution. Higher status scores denote taxa with known declining trends. Status scores range from -20 (increasing) to 20 (decreasing).

Population Trend in Alaska (-10 to 10)

Using data from 1993-2015, Handel and Sauer (2017) estimated significantly positive population trends for Southeast and southcoastal Alaska. Trends for central Alaska were not significant (Handel and Sauer 2017). To account for differences in trends, we rank this question as D-Population size stable or suspected increasing.

Score: -6

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 0

Status Total: -6

Biological

Variables measure aspects of a taxon's distribution, abundance and life history. Higher biological scores suggest greater vulnerability to extirpation. Biological scores range from -50 (least vulnerable) to 50 (most vulnerable).

Population Size in Alaska (-10 to 10)

>25,000 (Handel et al. 2009; PIF 2019). Occurs at high densities along forested Breeding Bird Survey routes in Southeast Alaska and on the Kenai Peninsula (Cotter and Andres 2000a).

Score: -10

Range Size in Alaska (-10 to 10)

Breeds in Southeast Alaska north along the coast to the Kenai Peninsula and the Chugach Mountains (Isleib and Kessel 1973; Kessel and Gibson 1978). Also breeds in parts of the eastern interior north to Birch Creek (Kessel and Gibson 1978; Wright et al. 2020). Range size is estimated at ~250,000 sq. km, based on map from ACCS (2017a). Overwinters along a small, coastal band from southern British Columbia to Baja California, and more broadly from Mexico south to Costa Rica (Wright et al. 2020).

Score: -8

Population Concentration in Alaska (-10 to 10)

Migrates in small groups. No large concentrations have been reported (Wright et al. 2020).

Score: -10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Unknown, but suspected to be 1-2 years (Wright et al. 2020).

Score: -5

Number of Young (-5 to 5)

Few data available. In Alaska, the most common clutch size was 6 eggs (Matsuoka et al. 1997a). Smaller clutches have been reported elsewhere (e.g., 3 to 5 in Oregon; Mannan et al. 1983).

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Few data are available for Alaska or elsewhere. Feeds mostly on insects and spiders, which are acquired mostly by gleaning from leaves of coniferous and deciduous trees (Matsuoka et al. 1997b; Wright et al. 2020). Because invertebrates are an ephemeral and potentially

unpredictable food source (e.g., Nebel et al. 2010), we rank this question as B- Moderately adaptable with key requirements common.

Score: 1

Habitat (-5 to 5)

Mainly associated with mature, coniferous and mixedwood forests (Kessler and Kogut 1985; Matsuoka et al. 1997a; 1997b; Handel and Sauer 2017; Wright et al. 2020). Nests are usually placed in large, coniferous trees (Matsuoka et al. 1997a; 1997b; Wright et al. 2020).

Score: 1

Biological Total: -30

Action

Variables measure current state of knowledge or extent of conservation efforts directed toward a given taxon. Higher action scores denote greater information needs due to lack of knowledge or conservation action. Action scores range from -40 (lower needs) to 40 (greater needs).

Management Plans and Regulations in Alaska (-10 to 10)

Protected under the Migratory Bird Treaty Act (MBTA 1918).

Score: 2

Knowledge of Distribution and Habitat in Alaska (-10 to 10)

Range and habitat associations are generally known through multi- species surveys (Isleib and Kessel 1973; Andres et al. 2004; Johnson et al. 2008b; see references in Habitat section).

Score: 2

Knowledge of Population Trends in Alaska (-10 to 10)

Data are sufficient for estimating population trends across a large part of its range (Handel and Sauer 2017).

Score: -2

Knowledge of Factors Limiting Populations in Alaska (-10 to 10)

Some knowledge of limiting factors. In southcentral Alaska, lower abundances have been correlated with the loss of spruce forests and overstory canopy from logging and spruce bark beetle infestations (Lance and Howell 2000; Collins et al. 2001). Also in southcentral Alaska, Matsuoka et al. (1997a) documented predation as the largest source of nest failures; they attributed mortality from the combination of *Protocalliphora* sp. parasites and inclement weather in 17% of the monitored nests (n =24). Additional studies are needed to investigate whether these mortality factors are related to environmental characteristics of the nest site and its surroundings (Matsuoka et al. 1997a).

Score: 2

Action Total: 4

Supplemental Information

Variables do not receive numerical scores. Instead, they are used to sort taxa to answer specific biological or management questions.

Harvest: None or Prohibited

Seasonal Occurrence: Breeding

Taxonomic Significance: Monotypic Species

% Global Range in Alaska: >10%

% Global Population in Alaska: 25-74%

Peripheral: No

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