Blackpoll Warbler

Setophaga striata

Class: Aves

Order: Passeriformes

Review Status: Reviewed (general)

Version Date: 10 June 2022

Note: Previously classified as Dendroica striata.

Conservation Status

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

Organization	Rank
NatureServe	G5/S4
ADF&G	Species of Greatest Conservation Need
Audubon Alaska	Red
BLM	Watch
IUCN	Near Threatened

Final Rank

Conservation Category: III. Orange

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	10
Biological	-50 to 50	-36
Action	-40 to 40	0

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 roadside Breeding Bird Surveys, Handel and Sauer (2017) noted statistically significant declines for both long- (1993-2015) and short-term (2003-2015) intervals in the Northwestern Interior Bird Conservation Region (roughly equivalent to central Alaska). Similar short-term declines were not noted using off-road survey data, however, sample size was smaller. Declines for this species have also been noted in several parts of its North American range (DeLuca et al. 2013; Sauer et al. 2017).

Score: 10

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 0

Status Total: 10

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)

PIF (2019) estimates the Alaska population to be >25,000 birds.

Score: -10

Range Size in Alaska (-10 to 10)

Breeds across forested parts of central Alaska from the base of the Alaska Peninsula east to Canada and north to the Brooks Range (DeLuca et al. 2013). Less common in southcentral Alaska, though it has been detected on the Kenai Peninsula and in areas bordering Prince William Sound (Isleib and Kessel 1973; Lance and Howell 2000). Overwinters in South America (DeLuca et al. 2013). Estimated size of breeding range is >400,000 sq. km., based on range map from ACCS (2017a).

Score: -10

Population Concentration in Alaska (-10 to 10)

Does not concentrate.

Score: -10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Most individuals are thought to start breeding at 2 years of age (DeLuca et al. 2013).

Score: -3

Number of Young (-5 to 5)

Typically 4 to 5 eggs with a range of 2 to 5 (Kessel 1989; DeLuca et al. 2013). For reasons that are not well-understood, Blackpoll Warblers can be either double- or single-brooded. Given the short summer season in Alaska, we assume that most, if not all, females will lay only one clutch per year.

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Little data for Alaska. Elsewhere in its breeding range, consumes mainly arthropods, including spiders, true flies, mosquitoes, ants, and beetle larvae (DeLuca et al. 2013). Fruit and seeds are consumed during fall migration (DeLuca et al. 2013). 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)

In Alaska, Blackpoll Warblers occur in a variety of shrub and forested habitats (Cotter and Andres 2000a). It is most common in spruce forests and in alder and willow shrub thickets at the transition between boreal and tundra biomes (Kessel and Gibson 1978; Kessel 1989; Cotter and Andres 2000a).

Score: -5

Biological Total: -36

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)

Distribution and habitat associations are well-known from multi-species bird surveys conducted throughout its range, including at the limits (e.g., Isleib and Kessel 1973; Tibbitts et al. 2006). This species is fairly frequently detected on Breeding Bird Survey routes (Cotter and Andres 2000a). In Southeast Alaska, individuals have been observed in the summer, however, additional work is needed to confirm breeding (Johnson et al. 2008b). Some knowledge of migration routes and wintering grounds (Holberton et al. 2015; DeLuca et al. 2019).

Score: -10

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

Data are adequate for estimating short- and long-term population trends (Handel and Sauer 2017).

Score: -2

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

Little is known about the factors that limit Blackpoll Warbler populations in Alaska, including factors contributing to its observed population declines. Given this species' migratory route, storms over the Atlantic Ocean could limit populations in some years (DeLuca et al. 2013; 2019). Additional research is also needed to predict the effects of climate change on this species' distribution as shrubline expand upward and outward (Sturm et al. 2001). In Denali National Park, for example, Mizel et al. (2016) observed Blackpoll Warblers colonizing new sites across the elevational gradient of their study.

Score: 10

Action Total: 0

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%

Peripheral: No

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