

Eastern Snow Bunting

Class: Aves
Order: Passeriformes

Plectrophenax nivalis nivalis

Note: This assessment refers to this subspecies only.

Review Status: Review requested

Version Date: 13 July 2020

Conservation Status

NatureServe: Agency:

G Rank: G5 ADF&G: Species of Greatest Conservation Need IUCN: Least Concern Audubon AK: Watch

S Rank: S5 USFWS: BLM:

Final Rank		
Conservation category: V. Orange		
unknown status and either high biological vulnerability or high action need		
Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	-32
Action	-40 to 40	24
Higher numerical scores denote greater concern		

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).

	Score
<i>Population Trend in Alaska (-10 to 10)</i> Unknown.	0
<i>Distribution Trend in Alaska (-10 to 10)</i> Unknown.	0
Status Total:	0

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).

	Score
<i>Population Size in Alaska (-10 to 10)</i> Unknown, but suspected large. This species has a fairly large breeding range and is common in coastal and alpine habitats north of southcentral Alaska (Kessel and Gibson 1978).	-6
<i>Range Size in Alaska (-10 to 10)</i> Patchily distributed in Alaska. During breeding, occurs along the coast of southwest, western, and northern Alaska, as well as in interior and southcentral Alaska, where it is restricted to alpine areas (Kessel and Gibson 1978; Montgomerie and Lyon 2011b). Additional surveys are needed on the Bering Sea islands and the Aleutian Islands, where this subspecies may intergrade with <i>P. n. townsendi</i> (Gibson and Withrow 2015). During winter, range includes southwest Alaska and, less	-8

commonly, central Alaska to southeast Alaska (Kessel and Gibson 1978). Some individuals also migrate south to Canada and the northern U.S. (Montmerie and Lyon 2011b). Wintering range is more restricted and is estimated to be between 100,000 and 400,000 sq. km, calculated in GIS and based off range maps from ACCS (2017a).

Population Concentration in Alaska (-10 to 10)

-10

During migration and over winter, typically forms flocks of a few dozen up to a few hundred individuals (Kessel and Gibson 1978; Montmerie and Lyon 2011b). This species is relatively widespread and common in appropriate habitats. We therefore estimate that there are >250 sites in Alaska.

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

-5

Unknown in Alaska. Elsewhere in its range, females thought to breed at one year (Montmerie and Lyon 2011b).

Number of Young (-5 to 5)

1

Little information available for Alaska. Clutch sizes between 3 to 7 eggs have been reported (Hanna 1923; Kessel 1989; Gibson and Byrd 2007), which is similar to mean clutch sizes reported for the species (Montmerie and Lyon 2011b). Double-brooding has been noted on the Pribilof Islands (Hanna 1923) and in Scotland (Montmerie and Lyon 2011b); however, additional data are needed to determine whether double-brooding is a common occurrence in Alaska.

Ecological Specialization in Alaska

Dietary (-5 to 5)

-5

Omnivorous. On the Pribilof Islands, diet include adult and larval insects (e.g. flies, beetles, caterpillars, etc.), as well as seeds of forbs, sedges, and grasses (Hanna 1923; Preble and McAtee 1923; Swarth 1934). On the Seward Peninsula, summer diet consists of spiders, insects, buds, and seeds, while in the winter they feed on seeds from a variety of forbs and grasses (Kessel 1989). Although there is little information available for Alaska, data are consistent with diet from other parts of this species' range (Montmerie and Lyon 2011b).

Habitat (-5 to 5)

1

Typically nests near dwarf shrub tundra habitat in rock crevices, such as those found in scree and boulder fields, glacial moraines, nunataks, and lava flows (USFWS 1988; Johnson and Herter 1989; Kessel 1989; Van Hemert et al. 2006; Montmerie and Lyon 2011b). However, this species can also nest in man-made structures, cliffs, and seabird nesting cavities (Kessel and Gibson 1978; Petersen et al. 1991; Hohenberger et al. 1994; Montmerie and Lyon 2011b). This species is usually associated with high elevations (Isleib and Kessel 1973; Johnson and Herter 1989; Tibbitts et al. 2006; Van Hemert et al. 2006), but it can also be found at or near sea level in appropriate habitat (USFWS 1988; Petersen et al. 1991).

Biological Total: -32

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 of lack of knowledge or conservation action. Action scores range from -40 (lower needs) to 40 (greater needs).

Score

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

2

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

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

2

Range and habitat associations are broadly known through multi-species bird surveys (see references

in Habitat section). However, range limits are not well-known because this subspecies co-occurs and intergrades with *P. n. townsendi* (Sealy 1969; Winker et al. 2002; Gibson and Withrow 2015). Limited data on migratory routes and wintering range.

Knowledge of Population Trends in Alaska (-10 to 10) 10
Not currently monitored in Alaska.

Knowledge of Factors Limiting Populations in Alaska (-10 to 10) 10
Very little information is available on the ecology of the snow bunting, including factors that limit its population (Montgomerie and Lyon 2011b).

Action Total: 24

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:	Year-round
Taxonomic Significance:	Subspecies
% Global Range in Alaska:	<10%
% Global Population in Alaska:	Unknown
Peripheral:	No

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