Pribilof Snow Bunting

Class: Aves
Order: Passeriformes

Plectrophenax nivalis townsendi

Note: This assessment refers to this subspecies only.

Review Status: Review requested **Version Date:** 24 June 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: **IV. Orange**

unknown status and high biological vulnerability and action need

Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	-10
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**

Population Trend in Alaska (-10 to 10) 0

Unknown.

Distribution Trend in Alaska (-10 to 10) 0

Unknown.

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**

Population Size in Alaska (-10 to 10) 6

Unknown, but suspected small given restricted range.

Range Size in Alaska (-10 to 10) -2

Occurs year-round on the western Alaska Peninsula and on the Shumagin, Aleutian, and Pribilof Islands (Gibson and Byrd 2007; Gibson and Withrow 2015). May intergrade with P. n. nivalis east of the central Aleutian Islands (Montgomerie and Lyon 2011b; Gibson and Withrow 2015). Some birds migrate further south to southern Alaska, Canada, and the northern U.S. (Montgomerie and Lyon 2011b). Breeding range is between 10,000 and 100,000 sq. km, calculated in GIS and based on range maps from ACCS (2017a).

Population Concentration in Alaska (-10 to 10) -6

Forms small flocks of up to a few hundred individuals during migration and over winter (Hanna 1923; Gibson and Byrd 2007; Montgomerie and Lyon 2011b). Given restricted range, we estimate that there are between 25 and 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 (Montgomerie and Lyon 2011b).

Number of Young (-5 to 5) 1

Limited 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 (Montgomerie and Lyon 2011b). Double-brooding has been noted on the Pribilof Islands (Hanna 1923) and in Scotland (Montgomerie 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 (Montgomerie 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 (Swarth 1934; USFWS 1988; Gibson and Byrd 2007; Pollom et al. 2015b; Mong and Romano 2017). However, this species can also nest in man-made structures, cliffs, and seabird nesting cavities (Kessel and Gibson 1978; Petersen et al. 1991; Montgomerie and Lyon 2011b). This species is usually associated with high elevations, but in appropriate habitat it can also be found at or near sea level (Hanna 1923; USFWS 1988; Petersen et al. 1991; Gibson and Byrd 2007). In the winter, commonly found at lower elevations in grass meadows and along beaches (Byrd et al. 1974; Gibson and Byrd 2007).

Biological Total: -10

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

Few data available. This subspecies occurs primarily on remote islands, which makes studying them difficult. They are detected during seabird surveys on the Aleutian and Pribilof Islands (e.g. Byrd et al. 1974; Kaler et al. 2011; Gladics et al. 2013; Pollom et al. 2015b; Croll et al. 2016; Mong and Romano 2017). However, because these surveys were designed for seabird species, information on breeding status, abundance, and habitat associations are limited. Eastern range limits are not well-known because this subspecies co-occurs and intergrades with P. n. nivalis (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:	≥75%
Peripheral:	No

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