

McKay's Bunting

Plectrophenax hyperboreus

Class: Aves

Order: Passeriformes

Review Status: Peer-reviewed

Version Date: 13 July 2020

Conservation Status

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

Organization	Rank
NatureServe	G3/S3
ADF&G	Species of Greatest Conservation Need
IUCN	Least Concern
Audubon AK	Yellow
USFWS	Bird of Conservation Concern
BLM	Sensitive

Final Rank

Conservation Category: **IV. Orange**

Unknown status and high biological vulnerability and action need

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

Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	-2
Action	-40 to 40	24

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)

Unknown.

Score: 0

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 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).

Population Size in Alaska (-10 to 10)

The entire global population breeds in Alaska and is estimated at 31,000 individuals (Matsuoka and Johnson 2008).

Score: -10

Range Size in Alaska (-10 to 10)

Breeds on Hall and St. Matthew Islands, which encompass an area of ~300 sq. km (Montgomerie and Lyon 2011a). Possible breeder on other small islands in the Bering Sea. Winters on the west coast from Kotzebue south to the Alaska Peninsula (Montgomerie and Lyon 2011a; Johnson et al. 2013). Incidental occurrences further east near Seward, Homer, and Kodiak Island (Montgomerie and Lyon 2011a).

Score: 8

Population Concentration in Alaska (-10 to 10)

Confirmed breeding on only two small islands in the Bering Sea (Montgomerie and Lyon 2011a).

Score: 2

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Likely less than 2 years, similar to the closely related Snow Bunting (*Plectrophenax nivalis*; Montgomerie and Lyon 2011b).

Score: -5

Number of Young (-5 to 5)

Females lay a single clutch ranging from 2 to 5 eggs, with a mean of 4 (Winker et al. 2002; Johnson et al. 2013).

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Diet information is extremely limited. Stomach contents from a specimen included sandwort (*Arenaria*) seeds and various insects such as beetles and flies (Preble and McAtee 1923). On Nunivak Island, observed eating rye grass seeds in the winter (Swarth 1934).

Score: 1

Habitat (-5 to 5)

Mostly found in rocky uplands, where nests are built within holes and crevices of rock scree, talus, and boulder fields (Winker et al. 2002; Matsuoka and Johnson 2008; Johnson et al. 2013;

R. Richardson, USGS, pers. comm.). Nests have also been found in or under driftwood (Hanna 1923; Johnson et al. 2013). Concentrates along the coast early in the breeding season (Johnson et al. 2013).

Score: 1

Biological Total: -2

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)

Breeding distribution and habitat on Hall Island and St. Matthew Island have been documented (Matsuoka and Johnson 2008; Johnson et al. 2013). Additional surveys are needed to determine whether they breed on other islands such as St. Lawrence Island (Sealy 1967). Wintering range is generally known, but habitat associations have not been well-described.

Score: 2

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

Population size available from surveying efforts on breeding grounds (Matsuoka and Johnson 2008). However, trend information is not available.

Score: 10

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

Studies have examined the nesting ecology and speciation of McKay's Bunting (Maley and Winker 2010; Johnson et al. 2013; Winker et al. 2018). However, little else is known about the ecology of this species and the factors that limit its population dynamics in Alaska.

Score: 10

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: Monotypic species

% Global Range in Alaska: >10%

% Global Population in Alaska: Endemic

Peripheral: No

References

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