

Chipping Sparrow

Spizella passerina

Class: Aves

Order: Passeriformes

Review Status: Reviewed (general)

Version Date: 03 June 2022

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

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	-11
Biological	-50 to 50	-31
Action	-40 to 40	16

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)

Handel and Sauer (2017) found a statistically significant increase in long-term (1993-2015) population trends in central Alaska. This positive trend was in contrast with BBS trend data from lower latitudes. Data were inadequate for estimating shorter-term trends or trends in southcoastal and Southeast Alaska.

Score: -6

Distribution Trend in Alaska (-10 to 10)

Chipping Sparrows may be expanding the northern edge of their range in Alaska, but additional research is needed. In Alaska, these songbirds are associated with shrub habitat, which are expanding northwards (Sturm et al. 2001; Tape et al. 2016). The contrast between increasing population trends in central Alaska and declining trends at lower latitudes lend support to this hypothesis (Handel and Sauer 2017).

Score: -5

Status Total: -11

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)

Uncertain, but likely >25,000. PIF (2019) estimates the Alaska population to be 680,000, with high uncertainty (95% CI = 240,000 to 1.3 million).

Score: -10

Range Size in Alaska (-10 to 10)

In Alaska, breeds in the Interior south through mainland Southeast Alaska (Gibson and Withrow 2015; Middleton 2020). Estimated range size is 369,000 sq. km., based on range map from ACCS (2017a).

Score: -8

Population Concentration in Alaska (-10 to 10)

Does not concentrate (Middleton 2020).

Score: -10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Unknown, but thought to breed within one year (Middleton 2020).

Score: -5

Number of Young (-5 to 5)

No data for Alaska. Elsewhere in its range, clutch sizes are typically between 3 and 4 eggs, and range from 2 to 5 (Middleton 2020). In some populations, some individuals lay two broods in a single season; the little data that are available suggest rates of double-brooding are less than 25%. It is unknown whether they lay two broods in Alaska, where the breeding season is shorter.

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Diet unknown in Alaska. Elsewhere in its range, it consumes a variety of seeds and, during the breeding season, insects from several taxonomic orders (Middleton 2020). Since very few studies have investigated dietary preferences and flexibility, we rank this question as 0-Unknown.

Score: 0

Habitat (-5 to 5)

Associated with shrub habitats including riverbanks, open woodlands (typically coniferous), and forest edges (Armstrong 2008; Johnson et al. 2008; Middleton 2020).

Score: 1

Biological Total: -31

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)

General distribution and habitat associations are known from multi-species bird surveys; however, many relevant aspects such as specific habitat associations and migratory routes remain unknown (Johnson et al. 2008; Phillips et al. 2017).

Score: 2

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

Data from on-road and off-road bird surveys allowed Handel and Sauer (2017) to estimate long-term population trends in central Alaska. The data, however, were not adequate for determining short-term trends or trends in southcoastal and Southeast Alaska.

Score: 2

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

Little is known about the ecology of this species or the factors that limit its population and distribution in Alaska. Because of its association with shrub habitats, the Chipping Sparrow seems to benefit from human modification of forest (Middleton 2020; Andres et al. 2004). In Alaska, the expansion of shrub habitats may be causing Chipping Sparrows to expand their distribution at the northern edge of their breeding range (Handel and Sauer 2017). Knowledge of specific dietary requirements is unknown, which makes it impossible to assess the effects of food supply and competition. Few data available for nesting success suggest that it is highly variable; nest failures are most commonly caused by predation and desertion in response to cowbird parasitism (Middleton 2020).

Score: 2

Action Total: 16

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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Alaska Center for Conservation Science
Alaska Natural Heritage Program
University of Alaska Anchorage
Anchorage, AK