Pine Siskin

Spinus pinus

Class: Aves

Order: Passeriformes

Review Status: Reviewed (general)

Version Date: 10 June 2022

Note: Previously classified as *Carduelis pinus*.

Conservation Status

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

Organization	Rank
NatureServe	G5/S4S5
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	-6
Biological	-50 to 50	-36
Action	-40 to 40	12

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)

Long-term data (1993-2015) suggest stable population trends in central and southern Alaska (Handel and Sauer 2017).

Score: -6

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 0

Status Total: -6

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) estimate the Alaska population to be >25,000.

Score: -10

Range Size in Alaska (-10 to 10)

Breeds in central Alaska and is a year-round resident from Southeast to southcentral Alaska (Kessel and Gibson 1978; Dawson 2014). Winter range is most restrictive and has an estimated size of 147,000 sq. km., based on map from ACCS (2017a).

Score: -8

Population Concentration in Alaska (-10 to 10)

Occasionally found in small flocks up to a few hundred individuals (Isleib and Kessel 1973; Johnson et al. 2008b; Heinl and Piston 2009), but does not concentrate in consistent geographic area or in large numbers relative to its population size.

Score: -10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Unknown, but suspected to be 1 year (Dawson 2014).

Score: -5

Number of Young (-5 to 5)

Little data for Alaska. Elsewhere in its breeding range, mean clutch size is typically between 3 and 4 eggs (Gabrielson and Lincoln 1959; Dawson 2014). Most populations are probably single-brooded. A replacement clutch can be lain if the first one is lost (Dawson 2014).

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Seeds and buds from grasses, forbs, and shrubs such as willows are consumed throughout the year (Gabrielson and Lincoln 1959; Dawson 2014). The Pine Siskin likely relies heavily on cone crops and mast-fruiting trees such as spruce and pine (Dawson 2014). Indeed, the irruptive and nomadic movements that this species is well-known for are thought to be linked to failures in food supply. During breeding season, this species also consumes adult and larval arthorpods including true flies, spiders, weevils, and caterpillars (Gabrielson and Lincoln 1959; Dawson 2014).

Score: 1

Habitat (-5 to 5)

Occurs primarily in forests including coniferous, deciduous, and mixedwod (Kessler and Kogut 1985; Cotter and Andres 2000a; Dawson 2014). Also found in shrub thickets and willow/herbaceous glacial plains (Isleib and Kessel 1973; Johnson et al. 2008b). Nests are placed on coniferous tree branches (Dawson 2014).

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 generally known from multi-bird species throughout its range (Lance and Howell 2000; Phillips et al. 2017; see citations in Habitat Specialization). The Pine Siskin has erratic movements and seemingly low annual fidelity to its breeding and wintering grounds (Dawson 2014). In Alaska, where it is both a year-round resident and breeder, there remains some confusion as to the extent of its breeding and wintering range (Kessel and Gibson 1978). Additional research is needed to understand the different movement behaviors that this species engages in throughout its annual cycle.

Score: 2

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

Monitoring data adequate to detect population trends across its range (Handel and Sauer 2017).

Score: -2

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

Little is known about the ecology of this species and the factors that limit its population and distribution in Alaska. Irruptive movements are thought to be linked to food supply, but additional data are needed to differentiate between erratic and more predictable movements (e.g., migration), and the factors that trigger irruptions (Dawson 2014). This species' erratic and nomadic nature also makes demographic data difficult to collect and interpret. Additional data are needed to determine the magnitude of predation and inclement weather on nest success (Dawson 2014).

Score: 10

Action Total: 12

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: <25%

Peripheral: No

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