

Steller's Jay

Cyanocitta stelleri

Class: Aves
Order: Passeriformes

Review Status: Peer-reviewed

Version Date: 06 February 2019

Conservation Status

NatureServe:

Agency:

G Rank: G5

ADF&G: Species of Greatest Conservation Need

IUCN: Least Concern

Audubon AK:

S Rank: S5

USFWS:

BLM:

Final Rank		
Conservation category: VII. Yellow		
low status and either high biological vulnerability or high action need		
<u>Category</u>	<u>Range</u>	<u>Score</u>
Status	-20 to 20	-6
Biological	-50 to 50	-41
Action	-40 to 40	16
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)

-6

Long-term trends (1993-2015) suggest a stable population (Handel and Sauer 2017). However, Steller's Jay are not often detected on Breeding Bird Survey (BBS) routes, precluding analysis of short-term trends (2003-2015; Handel and Sauer 2017). Not listed as declining or vulnerable by Audubon Alaska (<http://ak.audubon.org/conservation/alaska-watchlist>).

Distribution Trend in Alaska (-10 to 10)

0

Unknown.

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).

Score

Population Size in Alaska (-10 to 10)

-10

Uncertain, but >25,000. Partners in Flight estimates the Alaskan population size at 110,000 individuals (95% CI: 54,000-200,000; PIF 2019).

Range Size in Alaska (-10 to 10)

-8

Occurs from southcentral Alaska (including the Kenai Peninsula) south to southeast Alaska (ACCS 2017a). Estimated range size is >100,000 sq. km., but <400,000 sq. km.

<i>Population Concentration in Alaska (-10 to 10)</i>	-10
Does not concentrate.	
<i>Reproductive Potential in Alaska</i>	
<u>Age of First Reproduction (-5 to 5)</u>	-4
Probably 2-3 years (Walker et al. 2016). Little is known about the reproductive ecology of Steller's jay. Although juveniles (1 year old) can breed, limited data suggest that is rare (Brown 1964, qtd. in Walker et al. 2016).	
<u>Number of Young (-5 to 5)</u>	1
Little information available. In western U.S. and Canada, mean clutch size was 3.06 ± 0.82 SD, with a range between 1 and 4 eggs (Walker et al. 2016). Females likely lay a single clutch per year, though reneesting is possible if the first clutch fails (Walker et al. 2016).	
<i>Ecological Specialization in Alaska</i>	
<u>Dietary (-5 to 5)</u>	-5
Little is known about the diet of Steller's jay in Alaska, though it has been reported predated on bird eggs and frequenting bird feeders (Williamson et al. 1965; Sieving and Willson 1998; De Santo and Willson 2001). Elsewhere in their range, Steller's Jay are opportunistic omnivores, feeding on berries, seeds, and arthropods (Walker et al. 2016).	
<u>Habitat (-5 to 5)</u>	-5
Exhibits generalist habitat preferences (Hansen and Urban 1992; De Santo and Willson 2001; Vigallon and Marzluff 2005). In southeast Alaska, found in a variety of forest types including coniferous, deciduous, and mixedwood, as well as in clearcuts, young- and old-growth forests (Williamson et al. 1965; Kessler and Kogut 1985; Dellasala et al. 1996; Sieving and Willson 1998; De Santo and Willson 2001). Frequently observed in edge habitat, such as along wetland-forest and forests near residential areas (Williamson et al. 1965; Sieving and Willson 1998; De Santo and Willson 2001; Marzluff et al. 2004). Nests are constructed on tree branches and sometimes even on human structures (Vigallon and Marzluff 2005; Walker et al. 2016).	
Biological Total:	-41

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

<i>Management Plans and Regulations in Alaska (-10 to 10)</i>	2
Protected under the Migratory Bird Treaty Act (MBTA 1918).	
<i>Knowledge of Distribution and Habitat in Alaska (-10 to 10)</i>	2
Distribution is well-documented in southeast Alaska (including islands), but there are far fewer records in southcoastal and southcentral Alaska (ARCTOS 2016). Habitat associations are described, mostly from southeast Alaska (e.g. Kessler and Kogut 1985; Dellasala et al. 1996; Sieving and Willson 1998; De Santo and Willson 2001).	
<i>Knowledge of Population Trends in Alaska (-10 to 10)</i>	2
Surveys are largely concentrated in southeast Alaska (Handel and Sauer 2017). Steller's Jays are observed too infrequently to calculate short-term (12-year) trends (Handel and Sauer 2017).	
<i>Knowledge of Factors Limiting Populations in Alaska (-10 to 10)</i>	10
Very little is known about the factors that regulate Steller's Jay populations in Alaska or elsewhere, and most studies have focused on individual-, rather than population-level assessments of fitness. It	

is unclear whether Steller's Jays that live in close proximity to humans benefit from access to anthropogenic food sources. In central California, individuals near campgrounds were in better body condition and had higher reproductive rates than jays which lived in forests (West and Peery 2017); however, Marzluff and Neatherlin (2006) did not find any difference in home range size or reproduction between Steller's Jays living near or far from humans. Marzluff et al. (2004) found that individuals that used more complex habitat (patches, edges) had higher breeding success. Complex habitat may increase the amount of insects, berries, and nest sites available (Marzluff and Neatherlin 2006). Logging practices which increase the amount of edge habitat may therefore be beneficial for populations of Steller's Jays: on Prince of Wales Island, for example, abundance was highest in commercially thinned, young-growth forests (Dellasala et al. 1996).

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:	Year-round
Taxonomic Significance:	Monotypic species
% Global Range in Alaska:	<10%
% Global Population in Alaska:	<25%
Peripheral:	No

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