

Rock Sandpiper, Aleutian

Class: Aves
Order: Charadriiformes

Calidris ptilocnemis couesi

Note: This assessment refers to this subspecies only.

Review Status: Peer-reviewed

Version Date: 03 December 2018

Conservation Status

NatureServe: Agency:

G Rank: G5 ADF&G: Species of Greatest Conservation Need IUCN: Least Concern Audubon AK:

S Rank: S4B,S3N USFWS: BLM:

Final Rank		
Conservation category: V. Orange		
unknown status and either high biological vulnerability or high action need		
Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	-24
Action	-40 to 40	12
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
<i>Population Trend in Alaska (-10 to 10)</i> Unknown (ASG 2019).	0
<i>Distribution Trend in Alaska (-10 to 10)</i> Unknown.	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).

	Score
<i>Population Size in Alaska (-10 to 10)</i> 75,000 (ASG 2019).	-10
<i>Range Size in Alaska (-10 to 10)</i> Year-round resident. Breeds on several Aleutian Islands, the Shumagin Islands, Kodiak Island, and on the Alaska Peninsula (Gotthardt et al. 2009). Wintering range is not well-understood, but likely similar to breeding range (Gill et al. 2002b). Estimated range size is >100,000 sq. km. but <400,000 sq. km.	-8
<i>Population Concentration in Alaska (-10 to 10)</i> Little is known about staging and wintering areas, where they likely concentrate in large numbers	-6

(Gill et al. 2002b). Given population size, we assume that number of sites >25.

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

-3

Limited data suggest that approximately ~25% of the population first breeds at <2 years (Gill et al. 2002b). We assume that most females first breed when they are between 2 and 3 years old and therefore rank this question as C.

Number of Young (-5 to 5)

1

Normally 4 eggs per clutch, with a single clutch per year (Gill et al. 2002b; Gibson and Byrd 2007).

Ecological Specialization in Alaska

Dietary (-5 to 5)

1

Limited data are available. During non-breeding season, diet is marine-based and consists of roe, crustaceans, insect larvae, and mollusks (Gill et al. 2002b). The bivalve *Macoma balthica* appears to be a particularly important food source in the winter for this and other Rock Sandpiper subspecies (Gill et al. 2002b; Ruthrauff et al. 2013b). During the breeding season, they consume invertebrates, especially spiders and beetles (Gill et al. 2002b).

Habitat (-5 to 5)

1

Nests in moist dwarf-shrub and graminoid tundra meadows near the coast and upland to ~500m above sea level (Gill et al. 2002b; Gibson and Byrd 2007; McCaffery et al. 2012). Individuals near the coast have been observed foraging on rocky beaches (Gibson and Byrd 2007). During non-breeding, inhabits rocky intertidal areas and roosts on offshore rocks, driftwood, and anthropogenic structures such as docks (Gill et al. 2002b; Gibson and Byrd 2007).

Biological Total: -24

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)

-10

Protected under the Migratory Bird Treaty Act (MBTA 1918). Closed to recreational and subsistence harvesting (ADFG 2018e; AMBCC 2018).

Knowledge of Distribution and Habitat in Alaska (-10 to 10)

2

Breeding range and habitat associations are somewhat understood (reviewed in Gill et al. 2002b and Gotthardt et al. 2009). Staging areas and wintering range in Alaska are not well-known.

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

10

There is currently no monitoring program in place in Alaska that can provide data on population trends. Recent efforts such as PRISM surveys are promising (Bart and Johnston 2012), but this program is still in its infancy and multi-year data are not available. PRISM surveys within the range of the Aleutian Rock Sandpiper were conducted in 2002 and provided an initial estimate of population size (McCaffery et al. 2012). However, sandpipers were detected at only two sites and plots would have to be revisited in order to obtain population trend estimates.

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

10

Very little is known about the factors that influence population dynamics. Predation from non-native species such as Norwegian rats and Arctic foxes may limit populations on some Aleutian Islands where these species are still present (McCaffery et al. 2012; Croll et al. 2016). Surveys on Hawadax Island documented increased detection of nests after non-native rats had been eradicated (Croll et al.

2016). Heavy metal contaminants, including mercury and arsenic, were detected in individuals at several different sites (Rocque and Winker 2004), but it is unknown whether levels are high enough to have individual- or population-level effects.

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:	Subspecies
% Global Range in Alaska:	>10%
% Global Population in Alaska:	Endemic
Peripheral:	No

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