

# Pacific Golden-Plover

*Pluvialis fulva*

Class: Aves  
Order: Charadriiformes

**Review Status:** Peer-reviewed

**Version Date:** 09 February 2019

## Conservation Status

NatureServe:

Agency:

G Rank: G5

ADF&G: Species of Greatest Conservation Need

IUCN: Least Concern

Audubon AK:

S Rank: S4B

USFWS:

BLM:

Final Rank		
Conservation category: <b>V. Orange</b>		
unknown status and either high biological vulnerability or high action need		
Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	-30
Action	-40 to 40	12
<b>Higher numerical scores denote greater concern</b>		

**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)*

0

Unknown (ASG 2019).

*Distribution Trend in Alaska (-10 to 10)*

0

Unknown. Although outside the scope of this question, habitat suitability models predict an extreme loss of suitable breeding habitat by 2070 as a result of climate change (Wauchope et al. 2017).

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**

*Population Size in Alaska (-10 to 10)*

-10

Population size for Alaska is estimated at 42,500 (Andres et al. 2012a; ASG 2019).

*Range Size in Alaska (-10 to 10)*

-10

Breeds along the western coast from Cape Krusenstern south along the Seward Peninsula, the Yukon-Kuskokwim region, and the northeastern Alaska Peninsula (Bennett 1996; Savage 2011; Johnson et al. 2018b). Also breeds on St. Lawrence, Nunivak, and Nelson Islands (Johnson et al. 2018b).

Although there have been sightings of Pacific golden-plovers in southeast Alaska in the winter, this species is not considered to overwinter in the state (Johnson et al. 2018b). Individuals overwinter on islands and coastal areas in the Indian and Pacific Oceans (Figure 1 in Johnson et al. 2006).

Estimated breeding range is >400,000 sq. km.

*Population Concentration in Alaska (-10 to 10)* -2

Does not concentrate during breeding season. Incomplete knowledge of staging and stopover sites. Based on migratory routes of radio-tagged individuals, the Copper River Delta and King Salmon regions may be important stop-over sites during spring migration (Johnson et al. 2004). Additionally, 14,000 individuals are estimated to use Sishmaref Inlet during fall migration (Smith et al. 2012a; <http://netapp.audubon.org/iba/Reports/1022>). In the absence of any other information, we rank this question as  $0.5 * B + 0.5 * C$ .

*Reproductive Potential in Alaska*

Age of First Reproduction (-5 to 5) -5

Both sexes are able to breed in their first year (Johnson et al. 1993a; 2018b).

Number of Young (-5 to 5) 1

Typically lays a single clutch with 3 to 4 eggs per year (Savage and Johnson 2005; Johnson et al. 2018b). Can lay replacement clutches if the first one fails (Johnson et al. 2008d).

*Ecological Specialization in Alaska*

Dietary (-5 to 5) -5

Generalist omnivore. Feeds on a variety of terrestrial, freshwater, and marine invertebrates, including flying insects, earthworms, crustaceans, beetles, spiders, and bivalves (Johnson et al. 2018b). In Alaska, berries from the previous year may be an important food source upon arrival on breeding grounds (Johnson et al. 2018b). Other documented food items include seeds, leaves, amphibians, fish, and scraps of human food (Johnson et al. 2018b).

Habitat (-5 to 5) 1

During breeding, restricted to tundra habitats (Johnson et al. 2018b). Generally nests on thickly vegetated tundra ranging in moisture from dry to moist (Savage 2009; Ruthrauff et al. 2007; Johnson et al. 2018b). Nests have also been found on sparsely vegetated gravel sites (Sauer 1962; Savage 2009) and in tussock tundra in taiga-tundra ecotone (Bennett 1996; Ruthrauff et al. 2007). On the Seward Peninsula, competition with the American golden-plover may influence habitat use by limiting the availability of certain nest sites (Johnson et al. 2018b). During migration, uses both coastal and inland habitats (Johnson et al. 2018b).

Biological Total: -30

**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 (ADFG 2018e) and subsistence harvesting (AMBCC 2018).

*Knowledge of Distribution and Habitat in Alaska (-10 to 10)* 2

Habitat association and general distribution in Alaska are known from multi-species surveys (e.g. Andres and Browne 1998; Gill and Tibbitts 1999; Amundson et al. 2018), species-specific studies (Bennett 1996; Savage and Johnson 2005; Savage 2009; 2011), and many migratory studies (e.g. Johnson et al. 1997; 2001a; 2008c; 2012; 2015). Although this bird has been well-studied, ongoing range extent discoveries (Savage and Johnson 2005; Ruthrauff et al. 2007; Savage 2011) and an incomplete knowledge of staging and stopover sites (Johnson et al. 2015; Johnson et al. 2018b) indicate that further work is needed.

**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 in parts of this species' range were conducted in 2002 and provided an initial estimate of local population sizes (McCaffery et al. 2012). However, sample sizes were low and plots would have to be revisited in order to obtain trend estimates.

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

Little is known about the factors that limit population dynamics. Individuals on wintering sites exhibit high survival rates and have likely benefited from urban development that has produced suitable wintering habitats (Johnson et al. 2001c; 2008c; 2014b). Additional research is also needed to determine mortality rates and causes, and key habitats used by plovers during spring stopovers. Although plovers that overwinter in Hawaii make direct flights to Alaska, Japan is a critical spring stopover site for plovers that nest in western Alaska and overwinter on islands of the South and Central Pacific (Johnson et al. 2012; Johnson et al. 2015). Individuals spend up to a month there and acquire energy that may be critical for survival (Johnson et al. 2015). Mortality causes on breeding grounds are unknown, but adults of both sexes exhibit high survival (Johnson et al. 2001b). Reasons for nest failure and annual variations in nesting densities are unknown (Johnson et al. 1993a; Johnson et al. 2008b). Organic and inorganic contaminants were detected at levels that are unlikely to be harmful (Saalfeld et al. 2016), but additional research is needed. Late snow-melt may cause some individuals to abandon their nesting attempts, but did not explain all of the data (Johnson et al. 1993a).

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.

<b>Harvest:</b>	None or Prohibited
<b>Seasonal Occurrence:</b>	Breeding
<b>Taxonomic Significance:</b>	Monotypic species
<b>% Global Range in Alaska:</b>	<10%
<b>% Global Population in Alaska:</b>	<25%
<b>Peripheral:</b>	No

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