

# Marbled Godwit

Class: Aves  
Order: Charadriiformes

*Limosa fedoa beringiae*

Note: Only one subspecies, *L. f. beringiae*, occurs in Alaska.

**Review Status:** Peer-reviewed

**Version Date:** 03 December 2018

## Conservation Status

NatureServe: Agency:

G Rank: G5T1T2    ADF&G: Species of Greatest Conservation Need    IUCN: Least Concern    Audubon AK: Yellow

S Rank: S2B    USFWS: Bird of Conservation Concern    BLM: Sensitive

Final Rank		
Conservation category: <b>IV. Orange</b>		
unknown status and high biological vulnerability and action need		
Category	Range	Score
Status	-20 to 20	0
Biological	-50 to 50	4
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
<i>Population Trend in Alaska (-10 to 10)</i> Unknown (ASG 2019).	0
<i>Distribution Trend in Alaska (-10 to 10)</i> Unknown.	0
<b>Status Total:</b>	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> Uncertain, but likely between 2,000 and 3,000 individuals (Andres et al. 2012a). More recent surveys suggest that the population size might be closer to 10,000 individuals (McCaffery et al. 2012); however, the sample size that informed this estimate was very small. We therefore maintain the estimate in Andres et al. (2012a) until more data are available.	2
<i>Range Size in Alaska (-10 to 10)</i> Breeding range is on the Alaska Peninsula from Ugashik Bay south to Port Heiden and east to the Dog Salmon River (North et al. 1996; Savage et al. 2018). During migration, uses coastal areas of southwest, southcoastal, and southeast Alaska (Andres and Browne 1998; ASG 2019; Ruthrauff et al.	4

2019). Knowledge of overwintering range is incomplete, but includes coastal areas from northern Washington to California (Ruthrauff et al. 2019). Estimated size of breeding range is >1,000 sq. km. but <10,000 sq. km.

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

2

During breeding, concentrates at less than 25 sites on the Alaska Peninsula (Table 3 in Melcher et al. 2010). During spring migration, heavily concentrated in Controller Bay, at the far eastern edge of the Copper River Delta (D. Ruthrauff, USGS, pers. comm.). Cinder/Hook and Ugashik Lagoons are particularly important sites during spring, summer, and fall (Melcher et al. 2010; D. Ruthrauff, USGS, pers. comm.).

*Reproductive Potential in Alaska*

Age of First Reproduction (-5 to 5)

-1

Unknown, but likely >2 years (Gratto-Trevor 2000). Age of other *Limosa* species ranges from 2 to 4 (McCaffery and Gill 2001). We rank this question as  $0.5 * B + 0.5 * C$ .

Number of Young (-5 to 5)

1

Few nests have been found for this subspecies. 4 eggs were found in an active nest (Ruthrauff and Tibbitts 2009) and shells of 2 eggs were found in another nest (North et al. 1996). Average clutch size for other marbled godwit subspecies is 4 eggs, with females producing one clutch per year (Gratto-Trevor 2000).

*Ecological Specialization in Alaska*

Dietary (-5 to 5)

-5

Few data available for Alaska, though Gibson and Kessel (1989) observed marbled godwits feeding on small clams. Elsewhere in their coastal range, they consume a variety of marine invertebrates: crabs, small bivalves, snails, and polychaete worms (Gratto-Trevor 2000). On breeding grounds and staging areas inland, they consume aquatic and terrestrial invertebrates, small fish, and tubers from aquatic plants (Gratto-Trevor 2000).

Habitat (-5 to 5)

1

During breeding, found in moist and wet meadows dominated by graminoids, dwarf shrub and open low shrub (North and Tucker 1992; North et al. 1996; Mehall-Niswander 1997; Ruthrauff and Tibbitts 2009; Savage et al. 2018). Savage et al. (2018) found that godwits preferred dwarf shrub-willow habitats, which they describe as "rare" in the study area. Foraging and staging areas in Alaska are along estuaries and tidal flats (Gibson and Kessel 1989).

Biological Total: 4

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

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

2

Habitat associations are well-known (e.g. North and Tucker 1992; North et al. 1996; Mehall-Niswander 1997). Our knowledge of their migration and breeding distribution is still incomplete and is the subject of ongoing research (Savage et al. 2018; Ruthrauff et al. 2019).

<i>Knowledge of Population Trends in Alaska (-10 to 10)</i>	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 conducted in 2002 on the Alaska Peninsula (McCaffery et al. 2012) and helicopter surveys flown in 2006 and 2007 (D. Ruthrauff, USGS, pers. comm.) can be used to estimate population size. However, plots would have to be revisited in order to obtain trend estimates.	
<i>Knowledge of Factors Limiting Populations in Alaska (-10 to 10)</i>	10
At present, no information about the factors that limit this population.	
<b>Action Total:</b>	<b>12</b>

**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>	Not substantial
<b>Seasonal Occurrence:</b>	Breeding
<b>Taxonomic Significance:</b>	Monotypic species
<b>% Global Range in Alaska:</b>	>10%
<b>% Global Population in Alaska:</b>	Endemic
<b>Peripheral:</b>	No

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