

Glaucous Gull

Larus hyperboreus

Class: Aves

Order: Charadriiformes

Review Status: Peer-reviewed

Version Date: 12 July 2020

Conservation Status

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

Organization	Rank
NatureServe	G5/S5BS4N
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	-10
Biological	-50 to 50	-32
Action	-40 to 40	4

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)

Suspected to be increasing, based on trend estimates from the Arctic Coastal Plain (1991-2012; Stehn et al. 2013) and the Yukon-Kuskokwim Delta (2004-2014; Platte and Stehn 2015).

Score: -10

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 0

Status Total: -10

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)

Petersen et al. (2015a) estimated that 50,000 pairs (100,000 individuals) breed in Alaska. Estimates from the Arctic Coastal Plain and the Yukon-Kuskokwim Delta also point to a population size >25,000 (Stehn et al. 2013; Platte and Stehn 2015).

Score: -10

Range Size in Alaska (-10 to 10)

Breeds in northern and western Alaska, including on Nunivak Island and St. Lawrence Island (Denlinger 2006; Weiser and Gilchrist 2020). Overwinters in open water, on the Aleutian Islands and on the Pribilof Islands, however, most of the population leaves Alaska for the winter (Weiser and Gilchrist 2020; E. Weiser, USGS, pers. comm.). Size of breeding range is estimated at 235,000 sq. km, based on range map from ACCS (2017a).

Score: -8

Population Concentration in Alaska (-10 to 10)

Breeds in single pairs and colonies. 158 colonies have been documented (Petersen et al. 2015a).

Score: -6

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Can start breeding at 4 years (Weiser and Gilchrist 2020).

Score: 1

Number of Young (-5 to 5)

Usually 3 eggs, with 1 clutch per breeding season (Weiser and Gilchrist 2020).

Score: 1

Ecological Specialization in Alaska

Dietary (-5 to 5)

Opportunistic forager whose diet varies spatially and seasonally (Schmutz and Hobson 1998). Common food items include fish, marine invertebrates, other birds and their eggs, carrion, garbage, and small mammals (Schmutz and Hobson 1998; Weiser and Powell 2011).

Score: -5

Habitat (-5 to 5)

During breeding season, found in marine and freshwater coastal habitats on cliffs, islands, tundra, beaches, and near human settlements; rarely found more than a few kilometers inland (Weiser and Gilchrist 2020). Where ground predators are present, Glaucous Gulls will nest in

inaccessible locations, like cliff ledges or on freshwater islands. During winter, found on beaches, urban areas, and open water near shore (Weiser and Gilchrist 2020).

Score: -5

Biological Total: -32

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). Open to subsistence harvest with liberal harvest regulations (Petersen et al. 2015a; AMBCC 2020).

Score: 2

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

Habitat associations and range well known from many observations and surveys (Smith and Connors 1993; Arimitsu et al. 2007; Stehn et al. 2013; Platte and Stehn 2015).

Score: -10

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

Population estimates are available for the Yukon-Kuskokwim Delta and the Arctic Coastal Plain (Stehn et al. 2013; Platte and Stehn 2015) but are not available statewide.

Score: 2

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

Possible factors that limit this species' population include organic contaminants, which may affect chick growth and survival (Vander Pol et al. 2009), human harvest (Petersen et al. 2015a), and fisheries bycatch (Phillips et al. 2010; Krieger et al. 2019). Additional research is needed to determine these factors' effects. Winter distribution is likely constrained by sea ice and food availability (Weiser and Gilchrist 2020).

Score: 10

Action Total: 4

Supplemental Information

Variables do not receive numerical scores. Instead, they are used to sort taxa to answer specific biological or management questions.

Harvest: Substantial, regulations

Seasonal Occurrence: Breeding

Taxonomic Significance: Monotypic species

% Global Range in Alaska: <10%

% Global Population in Alaska: 25-74%

Peripheral: No

References

- Alaska Center for Conservation Science (ACCS). 2017a. Wildlife Data Portal. University of Alaska Anchorage. Available online: <http://aknhp.uaa.alaska.edu/apps/wildlife>
- Alaska Migratory Bird Co-Management Council (AMBCC). 2020. Regulations for the 2020 Alaska Subsistence Spring/Summer Migratory Bird Harvest. Office of the Alaska Migratory Bird Co-Management Council, U.S. Fish & Wildlife Service, Anchorage, AK, USA.
- Arimitsu, M. L., J. F. Piatt, and M. D. Romano. 2007. Distribution of ground-nesting marine birds along shorelines in Glacier Bay, southeastern Alaska: An assessment related to potential disturbance by back-country users. Scientific Investigations Report 2007-5278, U.S. Geological Survey, Reston, VA, USA.
- Krieger, J. R., A. M. Eich, and S. M. Fitzgerald. 2019. Seabird bycatch estimates for Alaska groundfish fisheries: 2018. NOAA Technical Memorandum NMFS-F/AKR-20, U.S. Department of Commerce, Washington, DC. DOI: 10.25923/hgft-we56
- Migratory Bird Treaty Act (MBTA). 1918. U.S. Code Title 16 §§ 703-712 Migratory Bird Treaty Act.
- Naves, L. C. 2015. Alaska subsistence bird harvest, 2004-2014 data book. Special Publication No. 2015-05, Alaska Department of Fish and Game, Division of Subsistence, Anchorage, AK, USA.
- Petersen, A., Irons, D. B., Gilchrist, H. G., Robertson, G. J., Boertmann, ..., and M. L. Mallory. L. 2015a. The Status of Glaucous Gulls *Larus hyperboreus* in the Circumpolar Arctic. Arctic, 68(1), 107-120.
- Phillips, E. M., H. M. Nevins, S. A. Hatch, A. M. Ramey, M. A. Miller, and J. T. Harvey. 2010. Seabird bycatch in Alaska demersal longline fishery trials: a demographic summary. Marine Ornithology 38:111–117.
- Platte, R. M., and R. A. Stehn. 2015. Abundance and trend of waterbirds on Alaska's Yukon-Kuskokwim Delta coast based on 1988 to 2014 aerial surveys. Waterfowl Management Branch, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Anchorage, AK, USA.
- Schmutz, J. A. and K. A. Hobson. 1998. Geographic, temporal, and age-specific variation in diets of Glaucous Gulls in western Alaska. Condor 100: 119-130.
- Smith, K. G., and P. G. Connors. 1993. Postbreeding habitat selection by shorebirds, water birds, and land birds at Barrow, Alaska: a multivariate analysis. Canadian Journal of Zoology 71(8):1629–1638. DOI: 10.1139/z93-229
- Stehn, R. A, W. W. Larned, and R. M. Platte. 2013. Analysis of aerial survey indices monitoring waterbird populations of the Arctic Coastal Plain, Alaska, 1986-2012. U.S. Fish and Wildlife Service, Anchorage and Soldotna, AK, USA.
- Vander Pol, S. S., P. R. Becker, M. B. Ellisor, A. J. Moors, R. S. Pugh, and D. G. Roseneau. 2009. Monitoring organic contaminants in eggs of glaucous and glaucous-winged gulls (*Larus hyperboreus* and *Larus glaucescens*) from Alaska. Environmental Pollution 157(3):755–762.
- Weiser, E. and H. G. Gilchrist. 2020. Glaucous Gull (*Larus hyperboreus*), version 1.0. In Billerman, S. M., ed. Birds of the World. Cornell Lab of Ornithology, Ithaca, NY, USA. <https://doi.org/10.2173/bow.glagul.01>

Weiser, E. L., and A. N. Powell. 2011. Evaluating gull diets: A comparison of conventional methods and stable isotope analysis. *Journal of Field Ornithology* 82(3):297–310. DOI: 10.1111/j.1557-9263.2011.00333.x

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