

Pelagic Cormorant

Urile pelagicus

Class: Aves

Order: Suliformes

Review Status: Peer-reviewed

Version Date: 26 June 2020

Note: Previously known as *Phalacrocorax pelagicus*.

Conservation Status

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

Organization	Rank
NatureServe	G5/S5
ADF&G	Species of Greatest Conservation Need
IUCN	Least Concern
USFWS	Bird of Conservation Concern

Final Rank

Conservation Category: **V. Orange**

Unknown 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	0
Biological	-50 to 50	-17
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)

Existing data from 2009-2018 suggest that some colonies are declining, while others are increasing (Dragoo et al. 2019). Given these conflicting trends, and because data are not available throughout its range in Alaska, we rank this question as 0- Unknown.

Score: 0

Distribution Trend in Alaska (-10 to 10)

Unknown.

Score: 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).

Population Size in Alaska (-10 to 10)

Statewide population is unknown, but likely between 10,000-25,000 birds based on counts from various colonies (Gibson and Byrd 2007; Romano et al. 2014; Corcoran 2016).

Score: -6

Range Size in Alaska (-10 to 10)

Occurs year-round in scattered colonies in coastal areas from Southeast Alaska to Cape Lisburne in northwestern Alaska. Also occurs throughout islands of the Bering Sea and the Gulf of Alaska, including some Aleutian Islands and Bering Sea Islands (Denlinger 2006; Hobson 2021). Estimated range size is 100,000 sq. km., based on range map from ACCS (2017a).

Score: -2

Population Concentration in Alaska (-10 to 10)

Concentrates in small, dispersed colonies, however, given the number of documented colonies and the range of Pelagic Cormorants in Alaska, the number of sites is likely >250 (Denlinger 2006).

Score: -10

Reproductive Potential in Alaska

Age of First Reproduction (-5 to 5)

Unknown, but suspected to be 2-3 years (Hobson 2021).

Score: -3

Number of Young (-5 to 5)

One clutch annually. Clutch size ranges from 1-7 eggs, with annual means ranging from 1.0 to 3.6 (Drummond and Williams 2015; Higgins et al. 2018; Hobson 2021). Because these averages span 2 ranking categories, we rank this question as $0.5 * B + 0.5 * C$.

Score: 2

Ecological Specialization in Alaska

Dietary (-5 to 5)

Consumes medium-sized, non-schooling fish (e.g., Pacific sand lance, sculpin, cod) and marine invertebrates (e.g., crustaceans, marine worms, eel) (Ainley et al. 1981; Dragoo et al. 2011; Hobson 2021). The proportion of specific prey items varies regionally and across years (Ainley

et al. 1981; Dragoo et al. 2011), suggesting a certain degree of adaptability at the species level. At the same time, individuals appear to have specialized foraging behaviors, which may limit their ability to respond to environmental change (Kotzerka et al. 2011).

Score: 1

Habitat (-5 to 5)

During breeding season, nests on steep cliffs and in crevices that are difficult for predators to access; also nests on human structures such as navigation beacons and bridges (Hobson 2021). Typically forages no more than a few kilometers from the shore (Kotzerka et al. 2011; Hobson 2021).

Score: 1

Biological Total: -17

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). Subsistence harvest is allowed and subject to closed seasons (AMBCC 2020). Harvest rates for cormorants appear to be low (Naves and Otis 2017).

Score: -10

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

Habitat associations and range during the breeding season are known from multi-species surveys conducted in Southeast Alaska (Slater and Byrd 2009), southcoastal (Cushing et al. 2018), the Aleutian Islands (Drummond and Williams 2015), and the Pribilof Islands (Romano et al. 2014). Foraging sites have also been identified as part of a foraging behavior study in the Gulf of Alaska (Kotzerka et al. 2011). Comparatively, little is known about the distribution of Pelagic Cormorants during the non-breeding season (but see Hatch et al. 2011b).

Score: 2

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

Colony and/or nest counts have been conducted on some islands, with limited trend information in some cases (e.g., Romano et al. 2014; Corcoran 2016; Dragoo et al. 2019), however, surveys are not consistently conducted across years or locations, and no statewide data are available.

Score: 2

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

Little is known about the factors that limit this species' population or distribution in Alaska. Subsistence harvest and bycatch mortality for cormorants appears to be low (Naves and Otis 2017; Krieger et al. 2019; but see Corcoran 2016). Elsewhere in this species' range, studies have shown that food availability, breeding experience, and nest-site selection influence breeding success (Hobson 2021). The importance of these factors on pelagic cormorants in Alaska is unknown.

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: Not substantial

Seasonal Occurrence: Year-round

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>
- Ainley, D. G., D. W. Anderson, and P. R. Kelly. 1981. Feeding ecology of marine cormorants in southwestern North America. *The Condor* 83(2):120–131. DOI: 10.2307/1367418
- 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.
- Corcoran, R. M. 2016. Nearshore marine bird and mammal surveys in the Kodiak Archipelago, 2011-2013. Refuge report no. 2016-1, Kodiak National Wildlife Refuge, U.S. Fish and Wildlife Service, Kodiak, AK, USA.
- Cushing, D. A., D. D. Roby, and D. B. Irons. 2018. Patterns of distribution, abundance, and change over time in a subarctic marine bird community. *Deep Sea Research Part II* 147:148–163. DOI: 10.1016/j.dsr2.2017.07.012
- Denlinger, L. M., comp. 2006. Alaska Seabird Information Series. Unpublished report, U.S. Fish and Wildlife Service, Migratory Bird Management, Anchorage, AK, USA.
- Dragoo, D. E., G. V. Byrd, and D. B. Irons. 2011. Breeding status, population trends and diets of seabirds in Alaska, 2008. Report AMNWR 2011/07, U.S. Fish and Wildlife Service, Homer, AK, USA.
- Dragoo, D. E., H. M. Renner, and R. S. A. Kaler. 2019. Breeding status and population trends of seabirds in Alaska, 2018. AMNWR 2019/03, U.S. Fish and Wildlife Service, Homer, AK, USA.
- Drummond, B. A., and J. C. Williams. 2015. Biological monitoring in the central Aleutian Islands, Alaska in 2009-2015. AMNWR 2015/16. U.S. Fish and Wildlife Service, Homer, AK, USA.
- Gibson, D. D., and G. V. Byrd. 2007. *Birds of the Aleutian Islands, Alaska*. Nuttall Ornithological Club, Cambridge, MA, USA.
- Hatch, S. A., V. A. Gill, and D. M. Mulcahy. 2011b. Migration and wintering sites of pelagic cormorants determined by satellite telemetry. *Journal of Field Ornithology* 82(3):269–278.

- Higgins, B., J. M. Soller, and N. A. Rojek. 2018. Biological monitoring at Chowiet Island, Alaska in 2018. AMNWR 2018/16, U.S. Fish and Wildlife Service, Homer, AK, USA.
- Hobson, K. A. 2021. Pelagic Cormorant (*Urile pelagicus*), version 1.1. In Billerman, S. M., ed. Birds of the World. Cornell Lab of Ornithology, Ithaca, NY, USA
<https://doi.org/10.2173/bow.pelcor.01.1>
- Kotzerka, J. 2011. Identification of foraging behaviour and feeding areas of three seabird species breeding sympatrically in a highly productive regime, the northern Gulf of Alaska. Ph.D., University of Kiel, Kiel, GER.
- Kotzerka, J., S. A. Hatch, and S. Garthe. 2011. Evidence for Foraging-Site Fidelity and Individual Foraging Behavior of Pelagic Cormorants Rearing Chicks in the Gulf of Alaska. *The Condor* 113(1):80–88.
- 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., and D. Otis. 2017. Alaska subsistence harvest of birds and eggs, 2016, Alaska migratory bird co-management council. Alaska Department of Fish and Game, Division of Subsistence, Anchorage, AK, USA.
- Romano, M. D., G. Thomson, J. C. Williams, and S. K. Wright. 2014. Cormorant surveys in the Pribilof Islands, Alaska in 2005 and 2013. AMNWR 2014/07, U.S. Fish and Wildlife Service, Homer, AK, USA.
- Slater, L., and G. V. Byrd. 2009. Status, trends, and patterns of covariation of breeding seabirds at St Lazaria Island, Southeast Alaska, 1994-2006. *Journal of Biogeography* 36(3):465–475. DOI: 10.1111/j.1365-2699.2008.02050.x