

Marine Mammal Protection Act Incidental Harassment Authorization Report

Glaucous-winged Gull Monitoring & Research in Glacier Bay National Park, Alaska

January 1 – December 31, 2020

Submitted by:

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Permits, Conservation, and Education Division

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Background

The National Marine Fisheries Service issued Glacier Bay National Park a Letter of Authorization (LOA) permit to effectively access island study sites for gull and climate monitoring in Glacier Bay National Park (GLBA), in southeastern Alaska from 2019 - 2024. The gull monitoring studies are mandated by a Record of Decision of an Legislative Environmental Impact Statement (NPS 2010) which states that Glacier Bay National Park must initiate a monitoring program for glaucous-winged gulls (*Larus glaucescens*) to inform future native egg harvest by the Hoonah Tlingit in Glacier Bay, Alaska. To effectively access the islands for gull monitoring, occasional minimal disturbance (or Level B harassment) of harbor seals may occur. Additionally, the National Park Service Inventory and Monitoring Program maintains a weather/climate station on Lone Island where harbor seals haul out seasonally. Our Letter of Authorization permit allows us to access five study sites up to five times per year for gull and climate research and monitoring activities. We expected that the disturbance to harbor seals would be minimal and limited to Level B harassment and would not result in serious injury or death.

Pre-survey monitoring

Five study sites were accessed a total of 13 times over the summer including 10 gull surveys and three visits to Lone Island for climate monitoring weather station maintenance. Harbor seals were observed hauled out on four of these occasions (Table 1). Each site was monitored for harbor seals at a distance of >500 m before approach. Steller sea lions were observed on a single survey of South Marble Island and a distance of 100 yards was maintained at all times with no disturbance.

Harbor seal disturbance

We encountered a total of 63 adult and 1 pup harbor seals hauled out at our study sites, of which 30 adults and one pup flushed in to the water, none moved >1 m but did not flush into the water and three became alert but did not move >1 m (Table 1). Harbor seals flushed at approximate distances ranging from 125 to greater than 500 meters. On 6/4, 20 of 23 harbor seals at Lone Island flushed at greater than 500 m whereas on 8/5 at Lone Island 10 adults and single pup did not flush until the vessel had approached to approximately 125 m. On 6/19 at Boulder Island 14 harbor seals did not flush at a distance greater than 500 m and on 6/5 16 harbor seals on Flapjack Island did not flush at approximately 500 m. In all interactions with harbor seals our vessel approached slowly and steadily in a manner that did not appear to cause panic or stampede as per the conditions of our LOA.

Marked or tagged marine mammals

We observed and photographed one branded Steller's sea lion at South Marble Island on 4/27 but did not conduct any survey or conduct a full count of sea lions at that time. A high resolution photo was sent to pinniped biologists at the Alaska Department of Fish and Game and the National Park Service.

Offshore predators

We did not observe predators such as killer whales near any of our study sites.

Table 1. Location, date and observations of surveys and marine mammals observed during gull and climate monitoring in Glacier Bay, January 1 – December 31, 2020. Distance indicates the minimum approach distance to the marine mammals. SMI = South Marble Island, HASE = harbor seal, SSL = Steller sea lion, HO = hauled out, * indicates that a full count of marine mammals was not conducted.

Location	Date	Time	Tide	Weather	Species	Number of Adults	Number of Pups	Original behavior	Level 3 Flushed	Level 2 Move	Level 1 Alert	Approximate Distance (m)	Survey Type
Boulder	5/28/2020	15:00	Flood	Overcast	HASE	0	0	-	-	-	-	-	Gull ground
Boulder	6/1/2020	10:00	High	Overcast	HASE	0	0	-	-	-	-	-	Gull ground
Boulder	6/19/2020	14:30	High	Overcast	HASE	14	0	0	0	0	0	>500 m	Gull ground
Boulder	8/5/2020	16:00	High	Overcast	HASE	0	0	0	0	0	0	0	Gull vessel
Flapjack	6/5/2020	13:15	High	Clear	HASE	16	0	0	0	0	0	500 m	Gull ground
Geikie	6/4/2020	13:30	High	Clear	HASE	0	0	-	-	-	-	-	Gull ground
Geikie	8/5/2020	14:30	Flood	Overcast	HASE	0	0	-	-	-	-	-	Gull vessel
Lone	5/7/2020	11:00	Low	Overcast	HASE	0	0	-	-	-	-	-	Climate
Lone	6/4/2020	15:30	Ebb	Clear	HASE	23	0	HO	20	0	3	>500 m	Gull ground
Lone	8/5/2020	15:00	High	Overcast	HASE	10	1	HO	11	0	0	125 m	Gull vessel
Lone	10/6/2020	10:00	Low	Overcast	HASE	0	0	-	-	-	-	-	Climate
Lone	10/8/2020	11:00	Low	Overcast	HASE	0	0	-	-	-	-	-	Climate
SMI	8/6/2020	15:00	Flood	Overcast	SSL	925	0	-	-	-	-	> 100 m	Gull vessel
				TOTAL	HASE	63	1	0	31	0	3		