



Cook Inlet Beluga (*Delphinapterus leucas*) in Upper Cook Inlet, Kenai & Kasilof Rivers



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Introduction

- The Cook Inlet Beluga (CIB): 1 of 5 Alaskan stocks¹
- Primarily found in the middle and upper Cook Inlet including Turnagain Arm and the lower Kenai River¹
- Endangered under the Endangered Species Act²
- 2018 population estimate = 269³
- Sharp decline raised concerns: pop. extinction, ecosystem implications and native Alaskans' reliance on CIBs for food and products.⁴

Results

Kenai River - 9/17/21

- 9 total belugas
- 5 with identifiable markings (Figs. 3-4)
- Behaviors: milling, traveling up river, feeding suspected
- 12 harbor seals (*Phoca vitulina*) obs.

Kasilof River - 9/17/21

- No belugas obs.
- 3 harbor seals obs.

Turnagain Arm - 9/19/21

- 23 total belugas
- Many with identifiable markings (Fig. 5)
- One beluga sighted at 09:17 at Windy Corner, resighted at 11:24 at Beluga Pt., trv'ld. approx. 19.3 km in 69 min. (Figs. 6-7)
- Behaviors: milling, traveling
- No other marine mammals obs.

Kenai River - 10/2/21

- No belugas obs.
- 36 harbor seals obs.

Discussion

- Color and size of belugas was used to determine age class
- Possible sources of disturbances recorded at the Kenai River included: 5 gunshots, Alaska Native Hunters travelling in a boat near beluga whales, and 14 aircraft overflights
- Threat of anthropogenic noise disturbing whales⁵
- Photographs submitted to Cook Inlet Beluga Whale photo ID Project and the Alaska Beluga Monitoring Program
- Photos will aid in photo ID of CIBs (e.g., Figs 3-7)
- Necropsy performed on beluga at Whiskey Gulch on 11/2/21 (Fig.8), data submitted to Alaska Marine Mammal Stranding Network



Figure 3. 1/3 marked belugas in the Kenai R.



Figure 4. 2/5 marked belugas in the Kenai R.



Figure 5. Marked beluga in Turnagain Arm.



Figure 6. 1st sighting of Turnagain Arm beluga.



Figure 7. 2nd sighting of Turnagain Arm beluga.

Materials and Methods

- Three land-based surveys done to photo-ID and count belugas in Kenai & Kasilof Rivers, & Turnagain Arm (Figs. 1-2)
- Bushnell 10x50 + Zeiss 10x32 HD binoculars
- Canon EOS 7D Mark II + Sony RX10 IV
- Rite in the Rain Notebook
- Garmin GPSMAP 78c
- AKBMP Session & Beluga Logs
- NOAA Belugas Count Marine Mammal Sighting Form & protocols
- Images enhanced for photo-ID

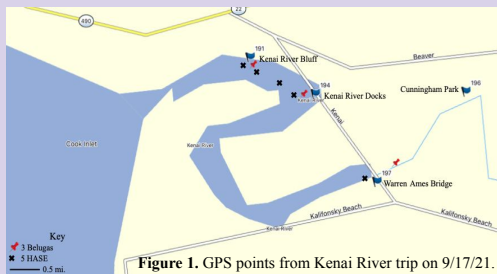


Figure 1. GPS points from Kenai River trip on 9/17/21.

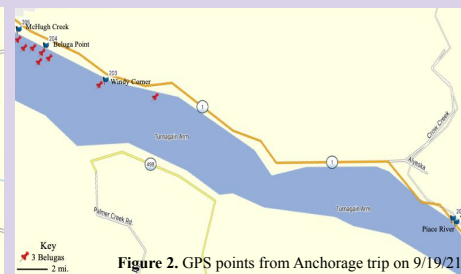


Figure 2. GPS points from Anchorage trip on 9/19/21.



Figure 8. Dead beluga at Whiskey Gulch.

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Kenai River Belugas



*All videos were taken by Alex Alasin

Turnagain Arm Belugas



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