



## Kittlitz's murrelets (KIMU)

Glacier Bay National Park  
Sitka National Historical Park  
Klondike Gold Rush National Historical Park

- From 2009 to 2015 summertime KIMU abundance estimates in Glacier Bay proper have ranged from 7,210 to 16,429.
- KIMU are wide-ranging each summer, but perennial Glacier Bay hotspots include Reid Inlet, Hugh Miller-Scidmore Complex, and the west side of Russell Island.
- Additional research is needed to understand the importance of glaciers to KIMU populations.
- Information on the distribution and abundance of KIMU in Glacier Bay informs research on the extent of interactions between visiting cruise ships and murrelets.



A Kittlitz's murrelet takes flight (NPS photo).

### Importance and Status

Annual monitoring of KIMU abundance confirms that Glacier Bay supports a large proportion of the global KIMU population every summer. In 2013, the U.S. Fish and Wildlife Service estimated the minimum global KIMU population at over 33,000 birds. While KIMU are no longer a candidate species for listing on the Endangered Species Act, they remain a priority conservation concern for the Pacific Seabird Group, who recently advocated for continued long-term research and monitoring. The Southeast Alaska Network murrelet monitoring program is currently the only existing long-term KIMU monitoring program in the world. Abundance estimates from 2009 to 2015 suggest that the KIMU population of Glacier Bay is highly variable (see figure).

KIMU may serve as an important indicator of terrestrial and marine ecosystem health within Glacier Bay. KIMU breed on bare, rocky ground which is often associated with areas where glaciers have recently retreated. According to the U.S. Fish and Wildlife Service, approximately 66% of the global KIMU population is associated with glacially influenced landscapes, which are subject to climate change-induced stressors.

Additional research is needed to better understand the connection between glacial habitat changes and KIMU population dynamics. As pelagic (open ocean) predators, KIMU utilize many of the same resources as marine mammals, including humpback whales, making them good indicators of the health of the marine food web. Our continued monitoring of KIMU, climate, and glacial extent will evolve our understanding of important changes occurring in the dynamic Glacier Bay ecosystem.



Estimated abundance of Kittlitz's murrelets found on the water in Glacier Bay during 2009-2015 surveys in early July. Error bars represent one standard error.

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