

Kittlitz's Murrelet Candidate Designation Questions & Answers

Q: What action is the Service taking?

A: The Service is designating Kittlitz's murrelet (*Brachyramphus brevirostris*) as a candidate species under the Federal Endangered Species Act.

Q: - Tell me about the Kittlitz's murrelet.

A: It is a small, diving seabird in the Alcid (auk) family, related to the marbled murrelet, puffins, murres, and auklets. It eats small fish and invertebrates, including macroplankton.

Q: What are candidate species?

A: Candidate species are plants and animals for which the Service has sufficient information to propose listing as threatened or endangered under the Endangered Species Act, but for which development of a proposed listing regulation is precluded by higher priority listing activities.

Q: What effect will designation of Kittlitz's murrelet as a candidate species have on people's activities where Kittlitz's murrelets are found?

A: None. Candidate species receive no statutory protections under the ESA. However, candidate status informs people that this is a species of conservation concern. The Service encourages the formation of partnerships among agencies, researchers and others with an interest in Kittlitz's murrelet to carry out research and conservation activities that may preclude the need to list this species as threatened or endangered.

Q: Why is Kittlitz's murrelet being designated a candidate species?

A: Kittlitz's murrelet has undergone steep population declines in several of its core population centers. In Prince William Sound Kittlitz's murrelets have declined by 84% since 1989 and could be extirpated from the region in 30 years. In Glacier Bay, population declines are less severe but at current rates this population could disappear in about 40 years. In the Malaspina Forelands Kittlitz's murrelet populations declined by at least 38%, and perhaps by as much as 75%, between 1992 and 2002. In the Kenai Fjords area, the Kittlitz's murrelet has declined by an estimated 83% since 1976. Population trend data do not exist for Icy Bay and Lower Cook Inlet, but there are population estimates for those regions, and obtaining information on trends in these locations is a high priority for researchers.

Q: What has caused the Kittlitz's murrelet to decline?

A: Researchers have not conclusively determined why Kittlitz's murrelet populations have declined. Factors that are strongly suspected to have negative effects on Kittlitz's murrelets and which may be causing their downward population trend include changes in the ocean environment and glacial retreat. Kittlitz's murrelets feed in glacially affected, near shore waters, and glacial recession could be altering their preferred foraging habitat

during the breeding season. Factors that are known to cause mortality of Kittlitz's murrelets include oil spills and gillnet fisheries. Factors that are suspected to cause disturbance of Kittlitz's murrelets during the breeding season are commercial and recreational boaters and flightseeing operations.

Q: What are the research priorities for Kittlitz's murrelet?

A: Our top priority is to complete our surveys of Kittlitz's murrelet range so to improve our worldwide population estimate. Our largest remaining survey gap is from Cape Suckling to Icy Bay. Repeating previous surveys done in Cook Inlet, Prince William Sound, Glacier Bay, Icy Bay, and in the Yakutat area will allow us to see what the recent population trends are for birds in these areas. A much more difficult research question awaits investigators who set out to determine whether and why glacial retreat is having a negative impact on these birds. We need information on the feeding ecology of the Kittlitz's murrelet as it relates to a whole host of marine conditions. This will allow us to determine what it is about tidewater glaciers and glacial outwash areas that makes them so attractive to this species, and why the birds do not do well without them.

The observed reproductive rate of Kittlitz's murrelets is abysmal. However, we don't know if this is because we are looking for chicks in the wrong place or because there are few chicks to observe. If breeding success has plummeted in recent decades, we need to figure out why.

Tour boats may disrupt Kittlitz's murrelet feeding areas near tidewater glaciers; turbulence from propellers may destroy the stratification in the water column and make forage fish temporarily unavailable. The boats may also repeatedly frighten these shy birds away from favored feeding habitat. These hypotheses need to be tested.

Finally, murrelets occasionally die in gill nets. We don't know if this is merely a rare occurrence or if fishery bycatch of Kittlitz's murrelets is a notable conservation concern. If studies indicate that it is a problem, then we need to figure out how to keep birds from getting tangled up in these nets

Q: When will Kittlitz's murrelet be proposed for listing as "threatened" or "endangered"?

A: A proposal to list Kittlitz's murrelet will be prepared when funding becomes available. There is not enough funding available to prepare listing proposals for all species which the Service has determined may warrant listing, so the Service must prioritize among these species. It is not known when funding will become available to propose listing the Kittlitz's murrelet.

Q: How many Kittlitz's murrelets exist?

A: Scientists estimate between 9,000 and 25,000 Kittlitz's murrelets exist worldwide.

Q: Where are Kittlitz's murrelets found worldwide?

A: Most of the world population of Kittlitz's murrelets breed, molt, and winter in Alaska. Small populations of Kittlitz's murrelets breed in the Russian far east.

Q: Where are Kittlitz's murrelets found in Alaska?

A: During breeding season Kittlitz's murrelets are found in several core population centers. These are the south side of the Alaska Peninsula, Prince William Sound, Lower Cook Inlet and Kenai Fjords, Icy Bay, Yakutat and the Malaspina forelands, and Glacier Bay. The winter range of Kittlitz's murrelet is not well known, since they move to offshore waters. They have been sighted in southeast and western Alaska, and in a few locations in southcoastal Alaska. They also occur in low densities during winter in the mid-shelf regions of the northern Gulf of Alaska.

Q: What are the habitat types in which Kittlitz's murrelets are found?

A: During breeding season (spring and summer) they prefer habitats near tidewater glaciers and, to a lesser extent offshore of remnant high-elevation glaciers and deglaciated coastal mountains. They nest in unvegetated scree (rock) fields, coastal cliffs, barren ground, rock ledges, and talus above timberline in coastal mountains. They feed around tidewater glaciers among icebergs and brash ice, but avoid areas that contain heavy ice. Kittlitz's murrelets also feed along coasts where waters are influenced by glacial outwash, such as the Malaspina Forelands.