

COMMON MURRE *Uria aalge*

Conservation Status

ALASKA: Low

N. AMERICAN: Moderate Concern

GLOBAL: Least Concern

| Breed | Eggs | Incubation | Fledge | Nest | Feeding Behavior | Diet |
|---------|------|------------|---------|------------------------|------------------|-----------------------------|
| May-Aug | 1 | 30-35 d | 19-21 d | cliff ledge, bare rock | surface dive | fish, crustaceans, mollusks |

Life History and Distribution

The Common Murre (*Uria aalge*) is one of the most numerous and most studied marine birds in the Northern Hemisphere. It is a large black and white seabird, with smallish wings which propel it during underwater dives in search of prey (mostly fish).

It is a highly social species and nests shoulder to shoulder, primarily on cliff ledges and slopes. Eggs are laid on bare rock. In addition to high nesting density, its unique breeding strategy includes; a high degree of egg laying synchrony, group colony departures, and simultaneous departure of chicks at just 3-4 weeks of age. The chicks are still unable to fly when they depart the colony and their remaining development takes place at sea in the company of their male parent.

In most of Alaska, Common Murres breed in mixed colonies with similar-looking Thick-billed Murres (*Uria lomvia*). They can be distinguished by a longer, thinner bill which tapers to the tip and is always black (the bill of the Thick-billed Murre has a white stripe along the bottom edge of the upper bill). Both species have white breasts and brownish throats, but the white breast of the Common Murre meets the brown throat in a straight line, not a “V” like in the Thick-billed Murre.

In Alaska, Common Murres breed in Southeast Alaska, the Gulf of Alaska, on the Aleutian Islands and north to Pt. Hope. Areas of particular significance are St. George Island, Bird Rock, Shaiak Island, North Twin, Round and Hall islands, and Cape Lisburne.

In winter Common Murres are found at sea, south of the ice edge, and on little islands in the Pacific. They often form large rafts of up to 250,000 birds.

Alaska Seasonal Distribution

| AK Region | Sp | S | F | W |
|----------------|----|---|---|---|
| Southeastern * | C | C | C | C |
| Southcoastal * | C | C | C | C |
| Southwestern * | C | C | C | C |
| Central | - | - | - | + |
| Western * | C | C | C | C |
| Northern | - | + | - | - |

C= Common, U= Uncommon, R= Rare, += Casual or accidental, - = Not known to occur, * = Known or probable breeder, Sp= Mar-May, S= June and July, F= Aug-Nov, W= Dec-Feb. © Armstrong 1995.



USFWS Lisa Sheffield

Population Estimates and Trends

The estimated world breeding population is 13-20.7 million birds. In Alaska, where the breeding range overlaps extensively with that of Thick-billed Murres, it is difficult to identify and assign every individual to a species. As a result, population estimates in Alaska include a percentage of unidentified murres at all colonies censused. The Alaskan Common Murre population is approximately 2.8 million breeding birds at 230 colonies.

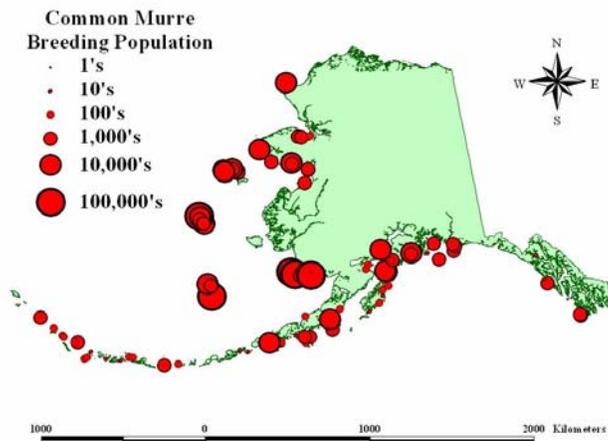
At sites where counts of murres are made from the water, it is especially difficult to differentiate the species. Common and Thick-billed Murres are often combined at these sites for population trend analysis. For sites where murres are not combined, significant negative trends were found for Common Murres on St. Paul Island in the Pribilof Islands (-3.6% per annum 1976-2002), Chisik/Duck islands in Cook Inlet (-9.0% per annum 1986-1999), and Cape Peirce in Bristol Bay (-4.5% per annum 1990-2003). Common Murres showed a significant positive trend (+7.1% per annum 1986-2000) on Gull Island in Kachemak Bay

Changes in sea surface temperatures seem to be associated with changes in murre population levels and oscillating patterns are typical of many, but not all Bering Sea and Aleutian Island colonies.

Conservation Concerns and Actions

Local murre populations can be significantly impacted by climate changes (changes in food availability) and numerous human activities.

Murres have high energetic (and thus, food) requirements which can put them in direct competition with commercial fisheries. An adult murre eats 10-30% of



Seabird breeding population maps created from data provided by the Beringian Seabird Colony Catalog Database. U. S. Fish and Wildlife Service, Anchorage, Alaska.

its body mass daily and they continue to feed chicks for 1-2 months after they leave the nesting area. A principal food for Common Murres is pollock (*Theragra chalcogramma*). This creates potential for conflict in the Bering Sea in Alaska where there is a huge pollock fishery. However, murres eat only juvenile Pollock; therefore, there is no direct conflict. In fact, too many adult pollock can result in high cannibalism of juveniles, so if more adult pollock are taken in the fisheries, it could result in more juvenile pollock available for murres.

In addition to direct competition, fisheries might affect seabird colonies in other ways such as boat disturbance, alteration of predator-prey relations among fish species, habitat disturbance, and fisheries bycatch and net entanglement. In Alaska, bycatch is monitored and recorded by the National Marine Fisheries Service, Alaska Marine Mammal Observer Program. Incidental mortality of Common Murres has been recorded in various types of commercial fisheries. Some murres are taken in trawl fisheries in Alaska, but the main source of incidental take is in gillnet fisheries. Over 70,000 Common and Thick-billed Murres nest within 60 miles of Kodiak Island. In 2002, the bycatch of Common Murres from the set gillnet fishery for Kodiak Island was estimated at 185 individuals. While these species comprised <1% of all colonial birds on Kodiak Island; they comprised 34% of the total bycatch. Other areas with recorded bycatch of Common Murres include; 183 Common Murres in 1999 in the Upper Cook Inlet salmon driftnet fishery, and 433 birds found dead or seriously injured in Prince William Sound salmon driftnets in 1991. These figures are extrapolated estimates from actual numbers of birds recovered in nets.

Other effects of human activities include hunting. In Alaska, murres and eggs are taken by Native subsistence hunters. Between the early 1990s and 2000, about 9,195 adult murres and almost 37,000 murre eggs were taken annually, with the majority of adult murres taken on St. Lawrence Island. The murres are not identified to species in the subsistence surveys and comprise both Common and Thick-billed Murres. Effects on the populations are not directly known, but current harvests are not thought to cause severe impacts.

Predation by introduced mammals, such as foxes, can also cause major reductions in colonies, delays in breeding, and impacts on reproductive success. During 1976, the presence of two red foxes (*Vulpes vulpes*) on Shaiak Island, in Bristol Bay, caused the loss of almost all

eggs of 25,000 pairs of Common Murres.

Murres are very vulnerable to oiling at sea because they have a low reproductive rate, large populations, dense concentrations in coastal habitats, and form “rafts” (flocks) on the water. No North American coast where murres occur has been exempt from major kills due to oil spills during the past 50 years. The *Exxon Valdez* oil spill in 1989 in Prince William Sound, Alaska, was the largest murre kill yet, with an estimated mortality of 185,000 murres. Long-term beached bird surveys also indicate chronic oiling, often without a known source. This susceptibility to oiling is what drives much of the research on the species

Recommended Management Actions

- Continue the current level or increase monitoring of Common Murre populations in Alaska.
- Initiate additional introduced predator removal programs, continue the rat introduction prevention program, and begin a rat response program.
- Work with state and federal agencies and fisheries councils to better understand and minimize the negative impacts of fisheries interactions.
- Support efforts to minimize the incidence of fuel spills near breeding and wintering areas and measure contaminants in Common Murre eggs.
- Work with the Alaska Migratory Bird Co-Management Council (AMBCC) to monitor subsistence use of Common Murres.
- Reduce human disturbance at colonies.

Regional Contact

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References

Ainley 2002; Armstrong 1995; Dragoo *et al.* In Press; IUCN Internet Website (2005); Kushlan *et al.* 2002; Manly 2004; Manly *et al.* 2003; Piatt and Ford 1996; Stephensen and Irons 2003; U.S. Fish and Wildlife Service 2006, U.S. Fish and Wildlife Service Internet Website (2005); Wynne *et al.* 1992, 1991.

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