

POMARINE JAEGER *Stercorarius pomarinus*

Conservation Status

ALASKA: Low

N. AMERICAN: Low Concern

GLOBAL: Least Concern

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
June-Aug	2	23-25 d	31-32 d	ground depression	piracy, hover, swoop	lemmings, voles, fish, birds

Life History and Distribution

Pomarine Jaegers (*Stercorarius pomarinus*) are the largest of the three species of jaegers, but they are still capable of amazing aerial maneuvers such as backward somersaults. Adults in breeding plumage are a spectacular sight with their long, spoon-shaped central tail feathers that are twisted 90 degrees. Both adults and juveniles have light and dark morphs or variation in plumage colors, but 90% of the adults are light. The light morph has a blackish cap and dark brown upperparts, white underparts and collar, a yellow wash on the sides of neck, and a bold brown band across the breast. The dark morph is similar except the underparts, sides of the neck, and collar are entirely dark brown. Juveniles are brown with a uniform head and neck and strongly barred coverts on the tail and underwing. After the breeding season, adults lose the long tail feathers and closely resemble immature birds. Identification of the three jaeger species in their winter plumage can be difficult.

The name “pomarine” is based on the scientific name which has Greek roots meaning “lid-nosed.” It refers to a pale, saddle-like sheath covering the base of the upper bill giving it a bi-colored appearance. This feature is found in all three species of jaegers.

A highly specialized reproductive ecology makes the Pomarine Jaeger especially interesting. Successful reproduction is dependent on a single species of prey, the brown lemming (*Lemmus trimucronatus*). This rodent is the most abundant resident, small vertebrate in the arctic. Populations of lemmings grow and shrink cyclically, peaking every three to five years. Pomarine Jaeger reproduction occurs successfully only during the peaks of the lemming cycle. Nesting habitat is usually near the arctic coast in low-lying wet tundra in areas with high biomass, periodic irruptions of lemmings. In years when lemmings are in low abundance, most Pomarine Jaegers leave the arctic almost immediately.

This jaeger is the only avian predator that digs for lemmings. They will dig vigorously into the burrows, using the bill to pull away vegetation. When lemmings become scarce, later in the season, groups of as many as 20 jaegers may walk over the tundra digging into lemming burrows searching for nests with females and young.

Breeding jaegers rely almost exclusively on lemmings for food, but in August, when lemmings are less available, they also eat shorebirds (mostly chicks), ducklings, and



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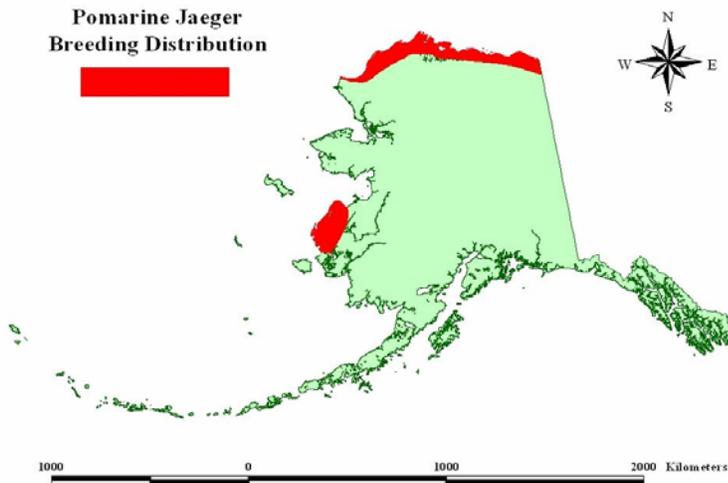
passerines. Nonbreeders take a greater variety of food during summer, including rodents, birds, eggs, insects, marine invertebrates, and carrion. Even though Pomarine Jaegers do not prey much on other birds, they do appear to have a major impact on their populations. During years with high densities of lemmings, breeding of shorebirds and passerines is disrupted by the presence and activity of numerous jaegers, snowy owls (*Nyctea scandiaca*), and arctic foxes (*Alopex lagopus*).

In northern Alaska, small numbers of Pomarine Jaegers also breed in localized areas with the presence of other small rodents such as tundra voles (*Microtus oeconomus*). When they are not breeding, Pomarine Jaegers spend their time at sea. They feed primarily by scavenging, predation on small seabirds, and stealing food from other birds.

Breeding distribution of this species is nearly circumpolar. They are only absent from eastern Greenland where *Lemmus* species do not occur and in northern Europe, west of the White Sea.

In Alaska, they are often present in summer from the Yukon Delta northward along the coast and on St. Lawrence Island in the Bering Sea. Breeding occurs along the arctic coast and on the Yukon Delta. They are found sporadically at any one site, but may be found sometimes in large numbers, especially near Barrow on the Beaufort Sea and in the outer Yukon Delta. Birds may wander widely in the arctic in summer, and presence of birds does not necessarily indicate breeding.

**Pomarine Jaeger
Breeding Distribution**



Seabird breeding distribution maps created from data in *Birds of North America*, Wiley and Lee 2000.

Alaska Seasonal Distribution

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

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.

Wintering occurs in productive regions of tropical and subtropical oceans and concentrations form over upwellings and boundaries of currents. North American breeding birds winter in the Caribbean, in smaller numbers off Florida and probably southern Texas, and from California to Peru.

Birds that breed outside North America winter near the coast of northwest Africa and are common near fishing fleets in coastal waters off southwestern Africa. They are also regular in winter in the Persian Gulf, the Gulf of Oman and the Gulf of Aden in the Middle East. These jaegers are common in the tropical Pacific and are the most numerous jaeger wintering off the coast of southeastern Australia.

Recent evidence shows the Pomarine Jaeger more closely related to the large skuas (*Catharacta spp.*) than to the other two jaegers.

Population Estimates and Trends

More often than not, ornithologists miss by chance, the peaks of lemming abundance in the arctic, thus missing the highest densities of breeding Pomarine Jaegers. This makes assessing population numbers and trends extremely difficult. The area near Barrow, Alaska is the only area where there is information about Pomarine Jaeger populations throughout an entire lemming cycle. No other neararctic area is known to support such high numbers of this species. Data are not available regarding population estimates or trends.

Conservation Concerns and Actions

Pomarine Jaegers may be the most vulnerable of the three species of jaegers to human disturbance because of their reliance on sporadic populations of lemmings for successful reproduction. Because of this unique reproductive strategy, they are also one of the least studied birds of the arctic. Most of the young produced in the arctic probably come from occasional large colonies coinciding with outbreaks of brown lemmings. However, it is not clear in how many areas of the arctic (besides Barrow) or when this occurs.

Survival in wintering areas may regulate populations in the long term, yet very little is also known of the distribution and biology of this species away from the breeding grounds.

The unpredictable occurrence of the species' nesting continues to make them a challenge for study and management.

Recommended Management Actions

- Develop standardized methods for censusing Alaskan breeding populations of Pomarine Jaegers.
- Establish a monitoring program.
- Measure productivity.
- Determine wintering areas and migration routes.
- Investigate links between lemming populations, Pomarine Jaegers, shorebirds, and Steller's Eiders (*Polysticta stelleri*) on the North Slope.
- Measure contaminants in Pomarine Jaeger eggs.

Regional Contact

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References

Armstrong 1995; IUCN Internet Website (2005); Kushlan *et al.* 2002; U.S. Fish and Wildlife Service 2002; Wiley and Lee 2000.
Full credit for the information in this document is given to the above references.