LEACH'S STORM-PETREL *Oceanodroma leucorhoa*

Conservation Status

ALASKA: Moderate **N. AMERICAN: Low Concern** **GLOBAL: Least Concern**

Breed	Eggs	Incubation	Fledge	Nest	Feeding Behavior	Diet
May-Oct	1	38-46 d	63-70 d	burrow, crevice	hover, surface dip	zooplankton, fish

Life History and Distribution

The Leach's Storm-Petrel *(Oceanodroma leucorhoa)* is a truly oceanic species, only returning to remote island breeding colonies under hours of darkness. It is strictly nocturnal at nesting sites to avoid predation and spends the rest of the year on the open ocean. Not a gregarious species, the Leach's Storm-Petrel does not follow ships like many other seabirds. The secretive nature of this species leaves many aspects of its life a mystery.

It is a medium-sized storm-petrel with mostly darkish-brown plumage (upperparts being slightly more gray). The tail is noticeably forked and it has a white patch on the rump. Wings are long and angled back at the "elbow" joint.

Construction of the wings and tail enable the Leach's Storm-Petrel to hover close to the water skimming food from the surface. Food varies seasonally and geographically and includes fish, squid, octopus, crustaceans, and jellyfish.

Nests are generally in underground burrows. The bill and feet are used to dig and shovel out soil. At some sites, nesting also occurs in talus crevices.

Breeding occurs on coasts and offshore islands from the Aleutian Islands in Alaska, south to Baja California. Nesting also occurs in the western Pacific Ocean and in the North Atlantic Ocean from Labrador south to Maine and Massachusetts.

In Alaska, the Leach's Storm-Petrel breeds on the Aleutian, Semidi, and Shumagin islands, in the Sandman Reefs, south of the Alaska Peninsula, and on St. Lazaria and Forrester islands in Southeast Alaska.

Alaska Seasonal Distribution

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

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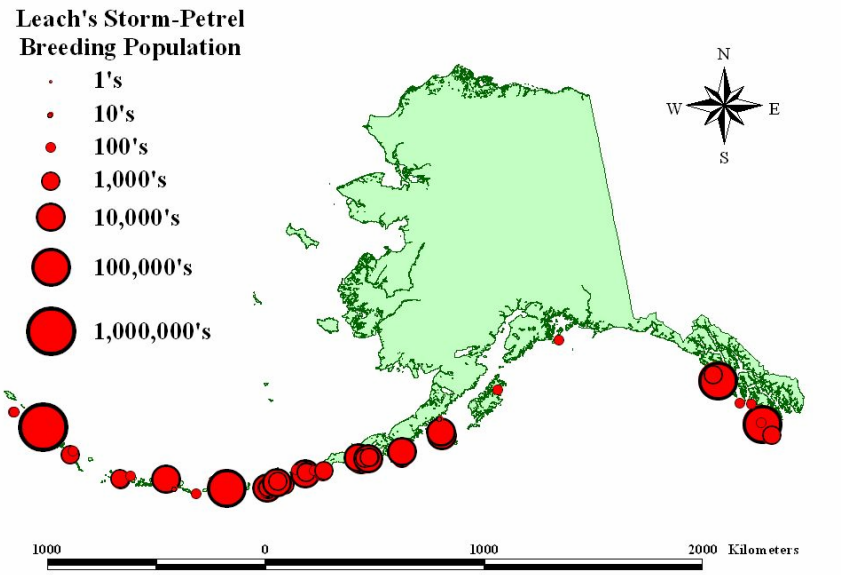
Four subspecies are recognized. *(Oceanodroma leucorhoa leucorhoa)* is found in the North Pacific and Atlantic Oceans, including Alaska, and is the largest of the subspecies. The smaller, dark-rumped Swinhoe's Storm-Petrel *(Oceanodroma monorhis)* which nests off Japan, Korea, China, and Russia, is so similar that it has been considered a race of Leach's Storm-Petrel; the two are considered a superspecies.

Leach's Storm-Petrels winter mostly in tropical waters. Alaskan breeding birds winter mostly in the central and eastern Pacific tropical waters, but some are seen year-round in the Gulf of Alaska. Others may be found as far south as the Galapagos Islands. Several smaller high-density wintering areas occur in Hawaii.

Population Estimates and Trends

Obtaining world estimates of breeding numbers has been extremely difficult. The Leach's Storm-Petrel is the most wide spread tubenose bird breeding in the Northern Hemisphere. However, the nocturnal and subterranean breeding habits of this species make seeing and counting the birds challenging. Furthermore, access to remote colonies during the hours of darkness is difficult and dangerous. Population estimates made between 1977 and 1992 indicated that the global abundance was more than eight million pairs. Millions more nonbreeders remain at sea or on the wintering grounds during the breeding season, although some of them do visit colonies during the



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

nesting season. In Alaska, there are 94 colonies with a breeding population of approximately 3.5 million pairs.

Leach's and Fork-tailed Storm-Petrel burrows were combined at most sites in Alaska for population monitoring purposes. Storm-Petrel populations increased (+3.9% per annum) on Buldir Island in the Aleutian Islands between 1974 and 2003, (+9.3% per annum) on Aiktak Island in the Aleutian Islands between 1990 and 2002, and (+7.4% per annum) on St. Lazaria Island in Southeast Alaska between 1993 and 2001. No other Alaskan colonies exhibited significant trends.

There were declines on the Atlantic coast prior to 1900, but the species has apparently stabilized there during the 20th century.

Conservation Concerns and Actions

Predation at breeding colonies is probably the main cause of mortality. Historically, Leach's Storm-Petrels were extirpated from many islands by introduced predators. Most petrels escape predatory mammals, which can dig up or enter burrows, by nesting on offshore islands. Intentionally or accidentally introduced predators, such as the red *(Vulpes vulpes)* or arctic fox (*Alopex lagopus)*, Norway rat (*Rattus norvegicus)*, and domestic dogs, cats, pigs, and cattle can have devastating effects on populations. Even the house mouse *(Mus musculus)* preys on newly hatched chicks and probably eggs. River otters (*Lutra canadensis*), bears *(Ursus spp.)*, and mink *(Mustela vison)* are also known predators. Alaskan populations on Rat and Kiska islands in the Aleutian Islands are believed to have been decimated by introduced foxes.

With a population of >8 million breeding pairs, the species seems healthy. However, because it is an inconspicuous bird both at sea and on the breeding grounds, and since monitoring is difficult, catastrophic declines could go unnoticed for decades.

Recommended Management Actions

- Maintain an Alaska-wide population of at least year 2000 levels.
- Maintain a monitoring program.
- Survey populations at index locations.
- Complete a nesting inventory.
- Restore Leach's Storm-Petrel populations and distribution to pre-mammal introduction conditions.
    - Continue efforts to reduce introduced predators such as foxes and rats.
    - Re-establish populations on islands after introduced mammals are removed.
- Determine wintering locations.
- Assess and regulate human presence at nesting sites to avoid soil erosion and burrow collapse.

Regional Contact

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References

Armstrong 1995; Dragoo *et al*. In Press; Huntington *et al.* 1996; IUCN Internet Website (2005); Kushlan *et al.* 2002; Stephensen and Irons 2003; U.S. Fish and Wildlife Service 2006, 2002.

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