

## Laysan Albatross nesting on Guadalupe Island, Mexico



Adult Laysan Albatross on Guadalupe Island, May 22, 1986. Photo/Alfredo Pereyra.

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**I**N MAY 1986, DURING A RESEARCH cruise off Baja California, Mexico, the crew of the yacht *Mystic Cove*, out of Marina del Rey, Los Angeles, California, discovered a breeding colony of Laysan Albatross (*Diomedea immutabilis*) on Guadalupe Island. Led by Captain Greg Jennings, the purpose of this cruise was to gather information on

the natural history and wildlife of Guadalupe Island for a journal article (Jennings 1987). The crew consisted of Ben Halfon, an experienced sailor, John Osterhout, a bird watcher-botanist, Georges Paradis, an aquatic biologist, Alfredo Pereyra, photographer, and myself, a cetacean ecologist.

Volcanic in origin, Guadalupe Island (29°N, 118°15'W) lies 250 miles due west of Punta Blanca, Mexico, and 180 miles southwest of Ensenada. Guadalupe is approximately twenty miles long and five miles wide, rising over 4000 feet at its highest elevation. Goats, introduced over a century ago, have greatly reduced the density and diversity of island vegetation (Moran 1967). Most of Guadalupe now appears as a moon-

Laysan Albatross chick on Guadalupe Island, May 22, 1986. Photo/Alfredo Pereyra.



scape, with lichens and succulents interspersed among the rocky terrain. Endemic species of palm (*Erythea edulis*) and oak (*Quercus tomentella*) still occur on the island but in very small numbers. A cypress forest (*Cupressus guadalupensis*) is located on the northwest side of Guadalupe Island (Wiggins 1980). There is a Mexican naval base located on the southeast tip of the island as well as two interior naval outcamps. The coastal base is also the site of a NOAA weather station. There are two principal Mexican fishing camps on Guadalupe, one on the west side of the island and the other to the northeast. While the fishing camps are used seasonally, the naval stations are inhabited year-round. A dirt road completed in 1985 runs along the length of the island, connecting the northeast fishing camp with the interior outcamps and coastal naval base to the south.

We first spotted a Laysan Albatross in the late afternoon of May 15, 1986, approximately 50 miles northeast of the island. Sailing in winds of 20–25 knots, we sighted this bird as it flew past our boat heading in the general direction of the island. We did not see another until the morning of May 18, when we discovered the first chick. A few of the inhabitants of the southeast naval base had invited our crew to accompany them on a goat (“chivo”) hunt. Our perch in the back of a pick-up afforded us an excellent panoramic view. We sighted the first albatross nest about one quarter of a mile up the road from the naval base. The nest contained one chick about the height of an adult bird, but covered with fluffy gray down and unable to fly. The nest was directly off the road and located in a rocky outcrop. Five adult albatrosses were present, flying overhead and landing close to the chick. Because we were on the goat hunt, we had time only to photograph the chick and proceed on our way.

On the afternoon of May 22 we returned on foot to explore the area further. The chick was sitting in the nest and appeared as it had four days earlier. Southeast of this nest and about 100 feet below the road, we discovered five more Laysan chicks. They were grouped in the same general area on a gradually sloping rocky bluff about 500 feet above sea level. All of the chicks were perched amongst volcanic rocks at ground level. Vegetation was sparse. Five or six adult

albatrosses were present, soaring in the updrafts of the cliff face and occasionally alighting on the ground and rocks in the vicinity of the chicks. Photographs were taken of the adults and chicks. Because no careful census was taken, it is not known if other breeding pairs or colonies occur on Guadalupe Island. Further studies are needed to assess the existence of other nests and assure preservation of this significant colony.

The Laysan Albatross is currently known to breed from November to August on the Leeward chain of the Hawaiian Islands (Palmer 1962; Rice and Kenyon 1962) and in very small numbers on the main Hawaiian Islands (Richardson 1957; Pyle 1983). The only recent record of nesting away from the Hawaiian chain is reported for Bonin Island, Japan (Hasegawa 1978). The Laysan is the most abundant albatross in the North Pacific (Pitman 1985). Numerous sightings of non-nesting Laysan Albatrosses off Baja California, Mexico, have led to the suggestion that this species is expanding its range (Pitman 1985). Accounts of the Laysan occurring during breeding season at Alijos Rocks, Mexico, indicate that a breeding population may be established there in the future (Pitman 1985). Alijos Rocks (24°57'N, 115°45'W) are located approximately 213 miles due west of Cabo San Lazaro, Mexico, and about 350 miles southeast of Guadalupe Island. These data, and the assumption that surplus birds may be available from the large protected colonies in the Leeward Hawaiian chain (Rice and Kenyon 1962), led Pitman (1985) to hypothesize that Laysan Albatrosses would colonize other islands in the North Pacific. Our recent sighting on Guadalupe Island confirms this hypothesis. As Guadalupe Island is approximately 2500 miles northeast of Hawaii, the discovery of this colony establishes the first breeding record of Laysan Albatrosses east of the Hawaiian Islands.

In May 1987, Robert Pitman observed three Laysans on San Benedicto Island, in the Revillagigedos, approximately 230 nautical miles south of the tip of Baja. There was no sign of nesting at the time, but all three birds were exhibiting courtship displays. It is possible that a colony could start on this island in the future. Such observations provide further evidence that the Laysans are extending their breeding range.

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