

Seabird Condos Readied At Channel Islands NP

By Gary Davis

Monitoring nesting success of seabirds is an important part of managing Channel Islands National Park and National Marine Sanctuary, located 6 to 31 miles off the southern California coast. In late January, 1986, the National Park Service installed two small observation platforms and 50 nesting boxes to assist park resource managers to monitor Cassin's auklets on Prince Island, a four hectare rock marking the northern boundary of Cuyler Harbor at San Miguel Island. The Prince Island seabird colony is the largest in southern California, with an estimated 20,000 auklets sharing the small island with breeding colonies of Brandt's, double crested, and pelagic cormorants, western gulls, ashly and Leach's storm-petrels, pigeon guillemots, black oystercatchers, and Xantus' murrelets.

Cassin's auklets dig burrows in soft sea cliffs on Prince Island for their nests, riddling the colony area with 10,000 holes. To prevent collapsing their burrows during censuses, two observation platforms, each a foot wide and 35' long, were installed in the colony before the birds returned for this year's nesting. From these platforms, resource managers will be able to determine occupancy rate in the colony and assess nesting success in subsequent years. Below each platform, 25 nesting boxes were also installed. The boxes all have a floor plan copied from natural burrows and tested in an auklet colony on the Farallon Islands, near San Francisco.

The park staff quickly labeled the boxes "condominiums" when they saw their identical external appearances and "floor plans." The 3½ inch wide entrances lead down gently sloping hallways a foot and a half into a cozy (8" x 8") nest chamber offset to the right. The boxes are partially buried in the sea cliff to shelter them from sun and wind. The roof of the nesting chamber is held in place by a rock, but may be removed to conduct periodic censuses to determine numbers of eggs laid, hatching success, and condition of chicks.

Cassin's auklets breed from the Aleutian Islands in Alaska to Isla San Roque off Baja California, Mexico. Since they burrow in the ground, their colonies need to be in places where predators can't get to their nests. They also need to be close to ample supplies of food. Offshore islands and rocks are their best refuge, but there aren't very many of these; the park offers the best locations in southern California with protection from human disturbance.

Egg laying generally begins in March at the Prince Island colony. Each pair of auklets produces only one egg per year, and only about a third to one half of the eggs laid actually hatch. Producing young auklets is a chancy proposition even under the best of conditions. Young birds leave their nests and learn to fly during the summer months from June through Au-

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Cassin's auklets will have this view from their new nesting box "condos" on the north shore of Prince Island in Channel Islands NP, Calif. The wooden observation platform over the nesting boxes will provide monitoring access without danger of collapsing underground tunnels.

gust. They are diving birds, feeding primarily on fish and euphausiid shrimp from offshore waters near San Miguel Island. They are especially vulnerable to oil pollution, and therefore serve as sensitive indicators of environmental conditions in the park.

Seabirds are important indicators of the health of marine and coastal ecosystems. A drastic decline in the number of young brown pelicans provided a dramatic warning of DDT pesticide contamination off the southern California coast in the 1960s. As they stumbled and then recovered in the 1970s and 1980s, they reflected improvements in the health of coastal ecosystems. California brown pelicans are now recovering, but the vigil must go on.

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