

CALIFORNIA SEA LIONS BREEDING AT AÑO NUEVO ISLAND, CALIFORNIA

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California sea lions, *Zalophus californianus*, are found along the west coast of North America from Vancouver Island, British Columbia, Canada (Hancock, 1970; Bigg, 1973; Mate, 1977) to the southern tip of the Baja California peninsula and south along the mainland of Mexico to Mazatlan (Lluch, 1969). Until recently, the northernmost breeding site for this population was San Miguel Island (34°N) in southern California (Le Boeuf and Bonnell, 1981). In 1977, a pup was born on southeast Farallon Island near San Francisco Bay (Pierotti et al., 1977). We now report breeding at yet another site in California, Año Nuevo Island (37°6'N).

Two newborn pups were observed on 13 June 1982, on the sandy beach on the leeward side of the island. The pups and their mothers were sighted intermittently until 25 July. Adult males in the vicinity of females and pups displayed harem defense behavior (Bartholomew and Peterson, 1967). The following year, on 12 June, two newborn pups were sighted in the same place. The pups were seen several times again until both were found dead in late June. A dead pregnant female and a dead pup were found on the island on 23 July and 17 August, respectively.

The northward extension of the breeding range of California sea lions may be a result of the continuing growth of the entire California-Mexico population during this century. The population in southern California has increased exponentially since censuses began in the 1920's (Bartholomew, 1967; Odell, 1971; Le Boeuf and Bonnell, 1981) and counts in Mexico have increased by about 30% since the mid-1960's (Le Boeuf et al., 1983). The number of California sea lions on Año Nuevo Island during fall northward migration of males has risen steadily since the mid-1970's to highs of almost 10,000 in 1982 and 1983. During recent years, an increasing number of young females has been observed among the migrant males. The increase in dispersal of young females to this central California site, plus the tendency of females to give birth in the same place year after year, makes it likely that Año Nuevo Island will become firmly established as a breeding colony for the species.

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