

1943:220) and De Groot (Condor, 33, 1931:188) at San Francisco Bay. Both the San Diego and the San Francisco colonies had located their nests on the flat tops of earthen dikes forming basins used by commercial salt works. Behavior of the birds at San Diego was almost identical with that noted by Miller and De Groot, as was nest construction, numbers of eggs, action of the newly-hatched birds, presence of small fish dropped by the parent birds near the nests, and the presence of small regurgitated pellets of fish scales.

A few differences, however, should be noted to add to the cumulative record of this bird in California. The San Francisco colony was concentrated along a dike that was much wider than that utilized by the birds at San Diego. Here, the nesting site was a dike averaging not more than four feet in width, so that the nests were staggered in rather uniform fashion along about 300 yards of the dike and in many places were placed practically on the edge of the dike. This no doubt accounted for the many dead young (approximately 30) which were found among the clods on the muddy beach at the base of the dike. In San Francisco a strong prevailing wind apparently accounted for numerous eggs found at the water's edge below the dike. This was not the case at San Diego. However, many of the nests—with eggs and young—were found on the beach itself, some of them placed as much as six feet from the base of the dike.

Another item of difference was an apparent gradient in the hatching time of the eggs within the colony at San Diego. Most of the nests at the south end of the dike still contained eggs at the time the observations were made. However, as the observers stepped carefully among the nests and proceeded northward through the colony, it was seen that the more northerly sets had hatched earlier. Finally, it was seen that there was a perfect series, ranging from the unhatched eggs, through a zone of nests containing eggs that were hatching at the time of the visit, and another group of nests where all eggs had hatched a few hours before the visitors appeared, and so on, up to the extreme northern end of the colony, where the birds were at least a week old and many were making their first attempt at swimming.

In addition to the bay smelt and shiner perch noted by Miller as common food for the young, the adults of the San Diego colony also provided black perch (*Embiotoca jacksoni*).

Unfortunately, circumstances prevented the taking of a census, and the writer can submit only a rough estimate of the population of the San Diego colony on May 18: approximately 100 nests and 250 adult birds. Many of the dead young examined had been banded.

During the three hours spent at the colony no evidence of predators was noted, with the exception of one California Gull (*Larus californicus*), which flew toward the colony and was driven off by a group of the adult terns.

Mr. Merrel A. Taylor guided the observers to the colony and reported that he had seen the same species nesting at the location in 1952.—D. L. EMBLEN, *San Diego, California, September 18, 1953.*

**Copulation of Anna Hummingbirds.**—On Sunday, August 30, 1953, at about 2:00 p.m., my husband and I were gardening at our home in the Montclair District, Oakland, Alameda County, California. Perched on the clothesline, singing, was a male Anna Hummingbird (*Calypte anna*). Each day for the previous ten days a male Anna Hummingbird had been perching in about the same place and singing, presumably the same male hummingbird. During the same ten days, a female Anna Hummingbird was frequently observed collecting tent caterpillar webs from our infested oak tree (*Quercus agrifolia*). The web gathering was resumed by the female this Sunday while the male continued his singing on the clothesline, twenty feet away. Suddenly the female flew from the oak tree and perched on another clothesline immediately over our heads. Instantly the male left his perch to hover over and then mount the female. During the few seconds of copulation the male's wings fluttered rapidly, while the female remained perched. Immediately after copulation, the female returned to the oak tree and the male to his perch on the clothesline. Although I did not note dates, there was courtship behavior by two Anna Hummingbirds in our yard just prior to August 30. After August 30, I occasionally saw the female in the oak tree and the male was on his usual perch and singing daily until September 27, when I noted that his song was shortened and not as frequent as on earlier dates. It was also during the period after August 30 that the male became very aggressive. For the first time in our garden an Anna Hummingbird succeeded in banishing an Allen Hummingbird. This he did fiercely and repeatedly.—BETTY TROUSDALE, *Oakland, California, January 21, 1954.*