

# DISTRIBUTION OF THE MOCKINGBIRD IN CALIFORNIA

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Several authors have commented on the expanding range of the Mockingbird (*Mimus polyglottos*) in California (Seymour 1978, Legg 1959). Grinnell (1911) first reported an expanding population of the Mockingbird in California, followed by my paper 23 years later (Arnold 1935). The present paper reports continuing range expansion and speculates on the factors influencing this expansion. Figure 1 shows the approximate range of the Mockingbird in California in 1978. This map does not indicate the many scattered fall and winter records.

## METHODS

During its breeding season the Mockingbird is readily located by its loud and well-known song-sequence. During recent years I have assessed the Mockingbird's abundance in California by taking extended trips through coastal valleys and the Sacramento and San Joaquin valleys during the breeding season; by corresponding with observers throughout the state; by perusing breeding bird census reports; by studying the nesting records from the Western Foundation of Vertebrate Zoology and from the North American Nest Record Program of Cornell University; and by examining published records.

## PAST DISTRIBUTION

The natural habitat of the Mockingbird in California prior to the arrival of the first European settlers was probably in the Biomes of Sagebrush, Chaparral and Desert in the Lower Sonoran Life Zone (Pitelka 1941). Early collectors referred to them as shy birds and one ornithologist (Cooper 1870:21) noted that they were:

“... so very wild that I could not get within gunshot of them, flying from the top of one bush to another at long distances and very watchful.”

## MOCKINGBIRD IN CALIFORNIA

Grinnell (1911:297) reported:

“Originally a bird of the wide open ‘wash,’ sparsely dotted with small live oaks, clumps of elder and sumach, and patches of prickly-pear cactus, the Mockingbird has come to be the most conspicuous avian tenant of the highly cultivated orchard and garden.”

Also, page 296:

“From Santa Barbara southeastward throughout the San Diegan faunal district the Mockingbird is well known as an abundant breeding species and permanent resident. It is in this San Diegan district, more particularly about suburban gardens and citrus orchards, that the species appears to thrive better than elsewhere in California.”

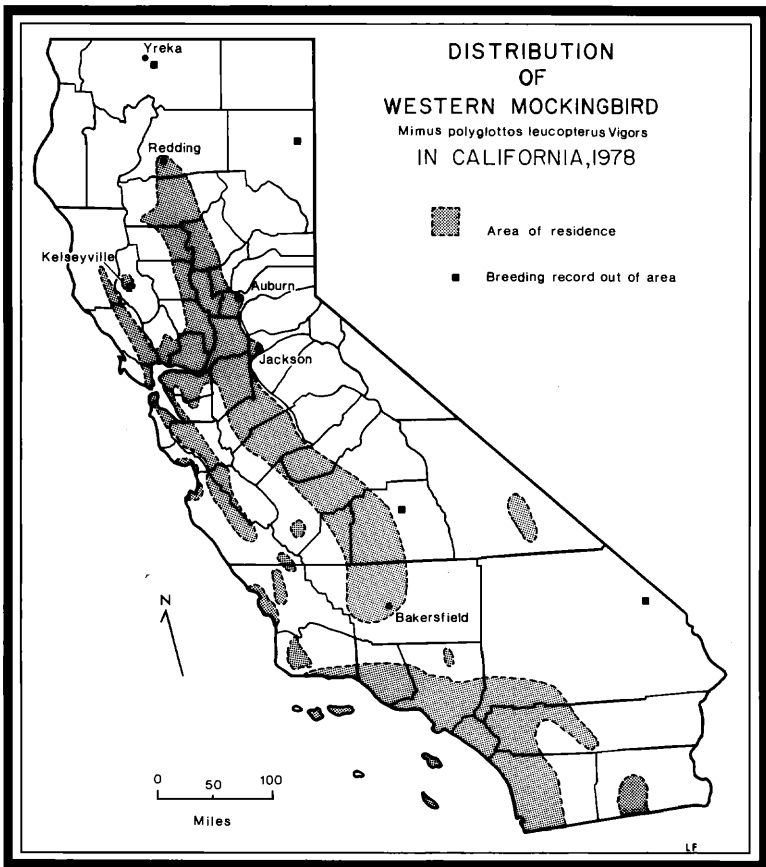


Figure 1

He also noted that in the highly cultivated portions of the Los Angeles-San Diegan area the Mockingbird appeared to have increased five-fold, whereas in its original habitat its numbers seemed to have remained constant. Grinnell (1911) mapped an area of "assumed constant and common residence" which did not reach Stockton in the San Joaquin Valley. By 1934 the range extended north into the Sacramento Valley with scattered, less dense populations farther north (Arnold 1935). In 1911 no areas of residence were known on the coast north of Santa Barbara, whereas in 1934 there were small pockets of residence in the Santa Maria-Lompoc area, in the San Luis Obispo area, and, after 1930, in Santa Cruz. By 1934, as the cultivation of the desert had increased, Mockingbirds had spread farther south and east in southern California.

## DISTRIBUTION IN 1978

### INTERIOR

In 1934 the Mockingbird was known to breed in only 28 of California's 58 counties. Now it is known to have nested in 45 of the 58 counties. The northernmost record for California is of a nest with 4 eggs found by Raymond Ekstrom on 24 May 1977 in the Killgore Hills, approximately 8 km east of Yreka, Siskiyou County. Ekstrom (pers. comm.) described the site as dry and bushy, in rolling hills with no trees for over 0.8 km. The nest was in a small bush "buck brush" about a meter off the ground. No Mockingbirds were observed in the area during a 1978 visit.

Another, isolated, northern breeding record is for Red Rock, Lassen County, where a nest and eggs were recorded on 19 June 1928 (Grinnell, Dixon and Linsdale 1930). Al Lapp (pers. comm.) reported two Mockingbirds at Wendel, Lassen County, on 11 June 1979 and stated that local people considered Mockingbirds to be resident. These records appear to be of isolated pairs in more or less native vegetation stands and not part of the expansion related to cultivated areas.

In the San Joaquin and Sacramento valleys, the Mockingbird is now resident from south of Bakersfield, Kern County, north to the vicinity of Redding, Shasta County. Mockingbirds have extended their range laterally in these valleys by taking advantage of a series of farms offering the necessary trees and shrubs for nesting sites. One such eastward extension is along Highway 80 as far east as Auburn, Placer County (pers. obs.). In June 1978 I found several in a residential district in Auburn, but I did not find them across the American River in the less urbanized area in El Dorado County.

John Clark (pers. comm.) who lives on a small farm a few miles north of Auburn has heard them singing at night for several summers.

Another eastward extension is developing along Highway 88 where a resident population has followed the scattered farms and settlements into Amador County in the vicinity of Jackson. In the northern Sacramento Valley, a westward expansion is occurring to the southwest of Corning, Tehama County.

#### COASTAL

On the coast north of Point Conception, the pockets of residence reported in 1934 have expanded to moderate-sized populations. The growth of the Santa Cruz population might be considered typical for the central coast region. McGregor (1901) summarized the observations of several ornithologists from 1883, 1884 and 1889, as well as notes from a 5 year resident ornithologist. The Mockingbird was not among the 139 species annotated. By 1911 several fall and winter records had been reported, and in 1930 the first nesting was recorded. Now the Mockingbird is an abundant resident in and about the city of Santa Cruz. Mockingbirds do not seem to have found suitable habitat in the areas surrounding Moss Landing and Castroville, although they are moderately abundant in Monterey, Pacific Grove and Watsonville. It is suggested that in Castroville and the adjacent artichoke fields, there are not enough trees and shrubs to provide nesting sites and food.

The arrival and range expansion of the Mockingbird in the San Francisco Bay region has been interesting. In 1911 no Mockingbirds were in the area, but in 1934 a small colony of about three pairs was established in Richmond, and another small colony was established in Walnut Creek, Contra Costa County. There were no records for San Francisco or north of the San Francisco Bay. Now resident populations are in portions of every county around the bay. The records of Emerson Stoner at Benicia, Solano County, illustrate clearly the increasing numbers of resident Mockingbirds. Stoner sighted the first Mockingbird at Benicia on 19 December 1933, recorded the first nesting on 23 April 1934 (Stoner 1934:253); and banded steadily increasing numbers of Mockingbirds in his yard until he banded 51 during June, July and August 1972 (pers. comm.).

Sonoma County, north of San Francisco Bay, furnishes a good example of the changes in Mockingbird distribution and numbers in this region. The first record known to me is a sighting on 28 October 1928 in Petaluma by E. L. Bickford (MS 1928). The county's first summer record, and possibly the first breeding record, was for 7 June 1953 by the late Gordon Bolander. Christmas Bird Counts

were started in Santa Rosa in 1961 and have been conducted yearly since that date. The average tally for 1961-1964 was 25 Mockingbirds, whereas the average for 1973-1977 was 132. During this same period, 1961-1977, the human population within the count circle had approximately doubled, with the attendant increase in new housing and new garden plantings affording both more food and more nesting sites for Mockingbirds.

North of Sonoma County, Mockingbirds have extended their range well into the interior valleys of Mendocino County, and a small colony has developed at Kelseyville, Lake County, and in the surrounding pear orchards there.

## DISCUSSION

Nowak (1975:137) expressed certain specifications for the spread of animal species: "...expansion (in the sense of permanent increase in range) can and must occur if and only if: 1) individuals or small groups of individuals disperse beyond present limits of the range; 2) the ecological valence of individuals in the new area enables them to carry out all their biotic functions normally; and 3) the natural birth rate of individuals in the newly occupied area is sufficiently high for their survival and the later stabilization of the population."

Much earlier Grinnell (1922) expressed it differently but in a way clearly applicable to the Mockingbird:

"It is a recognized, ... established principle that the presence in a region of any given bird species is absolutely dependent upon, first, the proper food supply, second, the right kind of breeding places, and third, the appropriate cover or protection of individuals ...."

While the Mockingbird has continued to use its original habitat the numbers residing there are few compared to Mockingbird populations in urban, suburban and rural agricultural (especially orchard) areas. The critical factors for the establishment of regular residence, i.e. permanent nesting populations, seem to be the presence of large shrubs of the type represented by *Pyracantha*, *Crataegus* and fruit trees. However, nests are placed in a great variety of trees. A well-established town, Castroville, not far from a large resident Mockingbird population, supported no Mockingbirds; the gardens were filled with colorful flowers but lacked the necessary shrubs and fruit trees. Examinations of new subdivisions in towns with large resident Mockingbird populations indicated that Mockingbirds do not spread from the older, established homes until the newer houses have well-established gardens with shrubs.

## SUMMARY

Since Mockingbirds appear in fall and winter in many areas outside their regular breeding territories, it is expected that soon after suitable suburban-urban habitat is available this species will become resident.

The Mockingbird, a native California species, while continuing to live in its original habitat, has adapted well to urban, suburban and agricultural areas, which has expanded its range. I expect the range to expand in Lake County and into the foothills of the Sierra Nevada as settlements develop along the major highways. New colonies will undoubtedly be found in some of the north coast valleys even though the species normally prefers warmer, drier climates.

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