204 Vol. XXXIII

SOME CHANGES IN THE BIRD LIFE OF WESTERN ORANGE COUNTY, CALIFORNIA

By JOHN McB. ROBERTSON

The area which I have under constant observation is about five miles east and west by about three miles north and south, and lies around the towns of Buena Park and Cypress, in western Orange County, California. Lying at the inner edge of the coastal plain it has no marked physiographic features. The agricultural settlement of this region started about forty-five years ago and since that time many changes in its bird life have occurred and some of them are still going on. Some of the more recent changes seem worthy of comment.

My earliest recollection of the Crow (Corvus brachyrhynchos hesperis) is as a winter visitor, coming in great straggling flocks, always from the west in the morning, and returning toward the west in the afternoon. They did not come every day, but sometimes for several days in succession, and then were absent for a while. These flocks, containing several thousand birds, straggled along, halting here and there to feed, and then hurrying on, a noisy black rabble, and added a touch of vagabondage to the bird life of those days when they favored us with their presence. On windy days they flew low, taking advantage of every group of trees, and at other times they came over high above us, mere specks against the clouds, or at moderate elevation they hurried by as if bent on important business. Sometimes when flying at a geat height they indulged in what seemed like play; as the individuals of the flock reached a certain place they dove earthward at great speed; with wings set they came down in steep spirals, until the air seemed filled with swiftly moving black specks and the rushing sound could be heard at some distance. At the bottom of this aerial slide they would collect in some open field and then proceed, a few at a time, in their ordinary manner. The winter roost that this flock came from lay somewhere to the west of us in the willows of the San Gabriel or Los Angeles river beds, and was purely a winter gathering place. The earliest date for the flock was November 5, 1923, and December, January, and February were the months when they most often came. Prior to 1921, the latest date in the spring when crows were seen was April 13, 1910, but in that year a few birds were seen at times until about June 15, marking the establishment of breeding birds somewhere within foraging distance.

The winter roost was continued for a number of years but has probably succumbed to the encroaching human occupation, as no large flocks have been seen since December 25, 1927. In the meantime crows have become firmly established as breeding birds and are present in small numbers throughout the year, using

eucalyptus trees as nesting sites.

The eastern portion of this area is given over largely to orange groves, and within the last three or four years the California Jay (Aphelocoma californica californica) has become established as a breeding bird in the southeastern portion of the area, and individuals have been seen several miles farther west, but always in or near orange groves, which seem to form an acceptable substitute for the natural environment of this bird. This seems to be a gradual encroachment from the east, as jays were resident in Anaheim as early as 1912.

The presence of the crow and the California Jay in the nesting season will, no doubt, call for readjustment among the other nesting birds that have not had these

notorious nest robbers to contend with until recently.

A newcomer of quite a different type is the Coast Bush-tit (*Psaltriparus minimus minimus*). Common in the willows of the rivers to the westward and in an olive grove in the hills to the northeastward, they were first noticed in this area in July, 1920, and have since become fairly common throughout the year. The orange groves form the usual habitat of the bush-tit, but they sometimes choose other places to nest. One nest, last year, was in a rose bush growing against the side of a house, and another was in a peach tree in a small family orchard. This season one has been reported to me in an orange tree close to a house, and another in a thick tangle of the so-called asparagus fern growing on the side of a house and close to a driveway. These birds are welcome additions to our bird life.

About thirty years ago a row of Lombardy poplars at the Centralia School furnished nesting sites for Red-shafted Flickers (Colaptes cafer collaris); and Sparrow Hawks (Falco sparverius sparverius) nested in the holes excavated by the flickers. Since those trees were cut down the Sparrow Hawks have not nested in this area to my knowledge, and it is only within the last three or four years that flickers have found suitable nesting places in power line poles. Two such locations are in use now and flickers are present throughout the year, but the Sparrow Hawk is here only in winter.

Another bird that has recently become resident is the Western Chipping Sparrow (Spizella passerina arizonae). Never a very abundant bird even in winter, a few pairs are present each year in the orange groves, and presumably nest, although I have not found a nest.

The Dwarf Cowbird (Molothrus ater obscurus) was first observed on May 27, 1923, and has since become quite common. It is noticed mostly in the nesting season when it is conspicuous with its grotesque actions and squeaky notes. I have found cowbird's eggs in the nests of Linnets (Carpodacus mexicanus frontalis) and Song Sparrows (Melospiza melodia cooperi), but as yet have had no opportunity to observe the development of the young. The adaptability of the young to the supposedly exclusive vegetable diet of the Linnet would make an interesting subject for observation.

The Burrowing Owl (Speotyto cunicularia hypugaea) is far less common than it used to be. The elimination of the ground squirrel from the greater part of the area has caused a concentration of Burrowing Owls in the few places where squirrel holes are still available for nesting sites, and the consequent competition for food may account for their decrease. The scarcity of nesting holes sometimes leads these owls to adopt the stand pipes of underground irrigation systems as daytime roosting places, and they probably attempt to nest in them at times with almost certain failure as their reward, as the irrigation season starts before they can raise a brood of young, and they get drowned out. I know of one case where a brood was raised in a pipe line that was no longer in use for irrigation and was broken so that they could get into the horizontal part of it.

These are some of the shifting scenes of the drama of bird life, adapting itself to the changes wrought by man.

Buena Park, California, May 3, 1931.