

possession of one of the towers of the building, nearly one hundred feet from the ground, was killed and the honey taken by ants that formed a line from the ground to the top of the tower and, by their overwhelming number, overcame the bees. If bees were killed by ants, why not young birds? Several nests of the Anna Hummingbird (*Calypte anna*) were located and kept under observation and in every case the young were killed and eaten within two or three days of the time they hatched.

A colony of Cliff Swallows (*Petrochelidon lunifrons*) that had nested in one of the towers was visited and some twenty-five dead nestings found on the roof under the nests. Several nests that seemed to have been used and abandoned were torn down, and in most of them were found dead young covered with ants, while a steady column of the insects marched from the top of the tower to the ground.

Several nests of Green-backed Goldfinch (*Astragalinus psaltria hesperophilus*) had been abandoned before the eggs hatched, the ants that were swarming over the tree and nest, doubtless being the cause.

Nests of Pipilo located in the shrubbery about the grounds suffered, as well as nests of all the other local species, and the only young birds that I saw about the grounds during two seasons were one or two broods of Green-backed Goldfinches and several of the Valley Quail (*Lophortyx californica vallicola*). Either these two nest in the more open ground where the ants are less abundant, or they are more resistant, for broods of nestlings were not uncommon and of normal size. Domestic fowls, however, suffer a heavy loss.

I was told by a member of the Park Board, living in Balboa Park, that he was unable to raise chickens, as the ants destroyed the chicks before they could emerge from the egg, entering the shell as soon as it was pipped and killing the occupant by sheer force of numbers, a statement easily to be believed by any that have seen the pest in action.

While the Argentine ant does not seem to extend its range rapidly, it is well established in many parts of southern California, and in such sections is certainly a menace to be seriously considered.—A. W. ANTHONY, *San Diego, California, March 26, 1923.*

Early Nesting of Nuttall Sparrow in Golden Gate Park.—In *The Condor*, vol. 18, no. 2, p. 44, Milton S. Ray mentions having found nests of the Nuttall Sparrow (*Zonotrichia leucophrys nuttalli*), with fresh eggs, in Golden Gate Park, San Francisco, as early as April 1. The most unusual drought of the past six weeks may have induced the birds to commence their spring housekeeping at an earlier date this year than is their ordinary custom. On March 28 (1923) some boys, who come regularly to the Academy for assistance in certain matters in which they are interested, reported the finding of a nest of this species which already contained two eggs. The bush in which this nest is built is in plain view from my desk and one of the birds was sitting upon the eggs when the nest was shown to me.—JOSEPH MAILLIARD, *California Academy of Sciences, San Francisco, March 30, 1923.*

A Guilty Road-runner: Circumstantial Evidence.—February 1, 1923, was one of the bleakest, coldest mornings of the winter, following a stormy night which had brought the snow nearly to the base of the mountains. Our home stands at the upper edge of the mesa slope near where the mountains sink into it. An overcast sky kept things chilled. On such a morning insect and reptilian life is conspicuously absent.

A sparrow trap (Biological Survey type) set in the native brush had been helping me with banding. When I abruptly came into view of the trap, at 11:30 A. M., I saw a Road-runner (*Geococcyx californianus*) crouched against the outside, its attitude that of an individual surprised at some devilry. It looked at me in wide-eyed terror for a moment and then ran into the brush and out of sight.

Curiosity took me toward the trap at once. Better had I retired instantly to a long-distance view and awaited developments. When I saw a sparrow on its back in the trap, however, I 'ducked' into the garage near by and ever so slightly pulled open the drawn shade so that my eye had a good view of the trap. Almost at once the Road-

runner came back and was pulling at the sparrow through the $\frac{3}{4}$ inch mesh of the trap; then, suddenly, its keen eye was looking squarely into mine, and away it went. This time it did not return although I watched for some time.

Later the sparrow was placed opposite the funnel entrance in the hope of enticing the Road-runner into the trap, but there was no evidence that it ever returned again.

On plucking the victim, a Golden-crowned Sparrow (*Zonotrichia coronata*), wearing my band no. 24801 (see its record on page 119), no bruises were found except on its skull, which, without having been pierced or broken, had the entire brain area dark with blood infusion. Nor had the skin of the crown been broken.

While I did not see the Road-runner do the killing, I suspect that it would have a hard time clearing itself, but might plead excessive hunger owing to the apparent difficulty in finding its natural food on such a morning.—J. EUGENE LAW, *Altadena, California, April 12, 1923.*

Another Musical Brown Towhee.—In my article, "Evidence of Musical 'Taste' in the Brown Towhee," which appeared in the November-December, 1922, issue of *The Condor*, I put on record two instances that had come under my personal observation of the Brown Towhee's addition of some musical syllables at the end of its regular song. I suggested the idea that this song elaboration indicated a racial rather than an individual tendency on the part of *Pipilo crissalis*.

Early this afternoon as I was passing a clump of shrubbery just west of the Stanford University Museum I was abruptly halted at hearing a Brown Towhee song which sounded like *tip—tip—tip—ip-prrrrr, treh-treh-treh*. The added syllables were not unmistakable imitations of any bird sounds that I know, but they at any rate suggested to my mind the chirp of *Carpodacus mexicanus frontalis* (one of which birds was vocalizing in the same tree with the Brown Towhee), and in a less degree the throaty-musical chirp of *Iridoprocne bicolor*. The syllables were uttered from two to four times; on the average, three. They were low in pitch; and were sung softly, almost as if whispered. Still, they were audible at twenty feet, as my wife, who was with me, can testify. They were uttered about as fast as one can possibly say them as above spelled,—i. e., *treh-treh-treh*. The most significant thing about them was the fact that they contained the same essential phonetic elements that appeared in the added syllables of my previous two Brown Towhee songs, namely, a vowel sound lower in frequency (pitch) than the 'i' in *tip*, and a musical *r*-sound. It is not at all impossible that the ear of the Brown Towhee would hear the *chreh*-sound of the House Wren, the *chrip*- (or *chrep*-) sound of the Linnet (see p. 193 of my article), and this *treh*-sound of origin unrecognized by me, as the same sound. The bird ear might respond negatively to the minor sound factors that cause these notes to sound different to the critical human ear. Certain it is that the three sounds are essentially identical in spite of the fact that I could tell them apart in the field and have indicated the slight differences that I heard by slight differences of spelling.

It strikes me as a rational assumption that, since I, a single observer, have on three separate occasions met with a Brown Towhee elaborating its song according to the same essentials of phonetics and form, none of the three songs heard could have been an individual freak. If this type of Brown Towhee song originated as a mutation, it obviously has passed safely beyond the individual stage and is being transmitted for probable survival as a specific character. It stands to reason that a good many Brown Towhees are now singing this new type of song. I hope that other observers will be on the alert for further examples, and I shall certainly be glad to hear from any who are able to substantiate my hypothesis.

In closing I wish to modify one statement that I made in my article. I said (p. 193) that I considered the regular song of the Brown Towhee stereotyped and subject to but little individual variation. Since writing that I have heard about half a dozen Brown Towhees sing songs that are mechanically unstable and irregular! It seems that among these birds there are more poor and inexperienced performers than I had assumed.—RICHARD M. HUNT, 735 Bryant Street, Palo Alto, California, May 12, 1923.