

point from which to hawk for insects. Not infrequently more than one bird might be seen perched on the same wire between two poles. Adults and young-of-the-year seemed equally disposed to make use of the wires. It is therefore evident that wire-perching is no unusual feat for woodpeckers of the genera *Asyndesmus* and *Balanosphyra*, to which *Melanerpes* should probably be added. Perhaps *Colaptes* can stand on a wire, but I am still inclined to question whether other, more definitely "tree-trunk," groups of woodpeckers are capable of so doing. Observations of others on this score would be of interest.—CLINTON G. ABBOTT, *San Diego Society of Natural History, San Diego, California, December 10, 1929.*

**Observations on the Dwarf Cowbird.**—During the time from 1920 to 1929 it has been interesting to note the apparent increase of the Dwarf Cowbird (*Molothrus ater obscurus*) in southern California. In 1920, the sight of a cowbird in the willow thickets of the San Gabriel River district and adjacent semi-arid washes was not common, and eggs were found only occasionally. Up to 1925, my records failed to show the finding of cowbird eggs in nests of any other species but California Yellow Warbler and San Diego Song Sparrow.

In 1926, I was able to get into this district but once during the nesting season. I found cowbirds flying about, in mating antics, in considerable "bunches" as compared with the season of 1920. During that one-day trip through the willows, I noted several California Yellow Warbler nests which contained cowbird's eggs, and I collected one of this warbler, the female of which was incubating, as a true maternal instinct urges, upon three eggs of the cowbird and not a single one of her own! These three eggs are, without a doubt, from the same cowbird as they are practically identical in shape, color, and size. What a delightful time the yellow warblers would have had supplying the demands of three such hungry ruffians!

In 1927, during the months of April and May, I found cowbird eggs in a much wider variety of nests, and it was about five o'clock on a May afternoon that I was extremely fortunate actually to see the performance of a female cowbird when she steals the opportunity to do the famous "sneak stunt" which carries on the race.

I was sitting beneath a sycamore taking a little rest, looking at an Arizona Hooded Oriole (*Icterus cucullatus nelsoni*) nest which was swung about twenty feet up, near-by. The female oriole was sitting on eggs at the time and was on the nest while I sat there, somewhat concealed by shrubbery. For some reason, she flew off the nest, probably to find a bit of food before darkness fell, and disappeared in the surrounding bushes. A few minutes after the oriole left the nest, a female Dwarf Cowbird flew quietly down from another part of the sycamore tree under which I was sitting, and scrambled into the oriole nest. To me, it seemed as though the affair was pre-arranged or timed by clock, for there certainly was no time lost in getting on the nest.

The total time the cowbird remained on the nest could not have exceeded two or three minutes. During this time she laid her egg, either kicked out, or with the use of her bill, removed one of the oriole's eggs, and was gone. The thing happened in such quick time that I hardly had time to see whether she took the oriole egg out of the nest before she laid her egg, or afterwards. However, I know there was an egg removed to make room for this "parasite", because I found the oriole egg where it was dropped.

In the course of a few minutes, the female oriole returned to her incubating duties, evidently unmindful of the fact that a radical change had been made in her household, a change which she probably would never discover, although the young cowbird would eventually be twice the size of her own young, and with about double the food capacity. This occurrence I have never seen since, and probably is a sight that one will witness only once in a lifetime.

In 1928 and 1929, I added several more species to the list of the victimized. One in particular was that of a Phainopepla (*Phainopepla nitens*) feeding a young cowbird in its nest with one of its own offspring. The cowbird actually was forcing the young "Pep" from his rightful cradle, and the adults were simply gorging the hoggish young cowbird with all the food it could hold, seemingly forgetting about their own "child" that was "somewhere in the bottom" of the overcrowded nest.

The following is a detailed report of cowbird parasitism for nine years of observation over a restricted area.

Date	Name	Number own eggs	Number cowbird eggs	Condition
April 16, 1920.....	California Yellow Warbler.....	2	1	occupied
May 10, 1920.....	California Yellow Warbler.....	3	1	occupied
May 10, 1920.....	San Diego Song Sparrow.....	3	1	occupied
May 12, 1921.....	California Yellow Warbler.....	3	1	occupied
April 21, 1922.....	California Yellow Warbler.....	3	1	occupied
May 1, 1923.....	California Yellow Warbler.....	2	2	deserted
April 26, 1924.....	San Diego Song Sparrow.....	3	1	occupied
May 15, 1925.....	Russet-backed Thrush.....	2	1	occupied
May 17, 1925.....	San Diego Song Sparrow.....	2	2	occupied
May 20, 1926.....	California Yellow Warbler.....	3	1	occupied
May 20, 1926.....	California Yellow Warbler.....	2	2	occupied
May 20, 1926.....	California Yellow Warbler.....	3	1	deserted
May 20, 1926.....	California Yellow Warbler.....	0	3	occupied
April 14, 1927.....	Western Gnatcatcher.....	3	1	occupied
April 14, 1927.....	San Diego Song Sparrow.....	3	1	occupied
April 20, 1927.....	California Least Vireo.....	2	1	occupied
April 30, 1927.....	California Least Vireo.....	2	2	deserted
May 8, 1927.....	Arizona Hooded Oriole.....	4	1	occupied
May 8, 1927.....	Pallid Wren-tit.....	3	1	occupied
May 15, 1927.....	Long-tailed Chat.....	3	1	occupied
April 28, 1928.....	Willow Goldfinch.....	2	1	occupied
May 1, 1928.....	Pacific Yellow-throat.....	3	1	occupied
May 30, 1928.....	San Diego Towhee.....	3	1	occupied
April 30, 1929.....	California Least Vireo.....	1	2	deserted
May 11, 1929.....	California Least Vireo.....	0	1	apparently deserted
May 27, 1929.....	San Diego Song Sparrow.....	0	2	occupied
June 2, 1929.....	Phainopepla.....	1 yg.	1 yg.	occupied
June 8, 1929.....	Traill Flycatcher.....	1	2	deserted

Of twenty-eight nests examined in this period of years, twenty-two were advancing normally and only six were deserted, among thirteen species, indicating that approximately four out of five nests observed which were victimized by cowbirds continued to produce broods unmindful of the parasitism. Of the six nests deserted, three were those of the California Least Vireo (*Vireo bellii pusillus*), of which there were only four nests found.

To sum up my observations, it would seem that in this area, the nest of the California Yellow Warbler was the choice prey, the birds making the best and least suspecting foster-parents, and that the California Least Vireo resented most these intrusions, even to the point of nest desertion. Further, the fact that the cowbird laid an egg about five o'clock in the afternoon seemed interesting, as the general belief is that eggs are laid during the early morning hours. Undoubtedly, there must be many cowbird eggs dropped because of no convenient nest in which to lay them, but as there are apparently numerous individuals depositing eggs throughout the day, the increase in their numbers can readily be realized. The finding of the egg in the nest of a San Diego Towhee was also interesting for the fact that the nest was exceedingly well concealed in tall grasses flush with the ground, and the question I would like to have answered is how and where did the cowbird remove the towhee egg at the time of the usurpation, as the nest was already on the ground, and with no tell-tale shell in sight?—J. STUART ROWLEY, *Alhambra, California, November 10, 1929.*