

FROM FIELD AND STUDY

A Commensal Relation of the California Quail with the California Ground Squirrel.—While walking along the lower trail on the south side of Strawberry Canyon in the Berkeley Hills, on August 25, 1927, at 5 P. M., my attention was attracted to a commotion, some twenty yards away on the opposite side of the creek, in a fringe of tar weed (*Madia sativa*) that grew along the edge of a perpendicular bank two feet in height. I soon saw that the commotion was caused by a California Ground Squirrel (*Otospermophilus grammurus beecheyi*) pulling down the stalks of the tar weed in order to eat the seeds of that plant. Indeed, the squirrel actually climbed into the tops of some of the larger plants that were so intertwined as to form a support sufficiently strong to bear his weight. In climbing and reaching for the heads of the tar weeds that overhung the bank, a goodly number of seeds were shattered to the ground at the base of the bank. There, three California Quail (*Lophortyx californica californica*) made the most of the opportunity by eating the seeds as fast as they fell on the ground.

To me, the seeds had a not unpleasant, oily, resinous taste. During the seven minutes that I remained on watch, the animals proceeded a distance of between twelve and fifteen feet. The quail at the foot of the bank closely followed along below the squirrel. Once, the squirrel abruptly moved a distance of four feet between feeding positions. The quail followed; but whether or not the birds recognized the cause and effect involved, I do not know. Perhaps they did not even follow the squirrel but were attracted to the spot four feet distant only by the edible seeds that they perceived there. However this may have been, the phenomenon constitutes an interesting commensal relation not, in so far as I am aware, previously noted between these two species.—E. RAYMOND HALL, *Museum of Vertebrate Zoology, University of California, Berkeley, September 8, 1927.*

Western Wood Pewees and Dwarf Cowbirds Nesting in San Diego.—For several seasons past Western Wood Pewees (*Myiochanes richardsoni*) have nested in the grounds of the San Diego Zoological Gardens. In the summer of 1923, a pair of this species was observed feeding a young Dwarf Cowbird (*Molothrus ater obscurus*) just out of the nest. The young impostor would sit on a fence or low branch of a tree and beg continuously; and when one of its foster-parents brought it food, it would take the proffered tidbit and fly to the ground with it before eating. This procedure annoyed the Wood Pewees greatly and they would dart down at their unnatural young one, scolding vigorously, and attempt to drive it back to its former perch. They continued to feed their wayward child, however, until the latter was fully developed and well able to care for itself.

In 1924, another Cowbird was raised by the Wood Pewees, and again the difference in feeding habits caused much friction between the young bird and its foster parents. In 1925, no observations were made, and in 1926, three young Wood Pewees were raised and successfully launched into the world. This year, 1927, a Western Wood Pewee was discovered starting its nest on a high branch of a eucalyptus tree standing in a canyon in the Zoo grounds and just back of the O'Rourke Zoological Institute, so that the nest is on the level of the first floor windows of that building. When the nest was first seen, on May 11, it was just started; and now, on the 19th, the bird is presumably laying its eggs but has not yet started steady brooding. At every trip with material the pewee would enter the nest and mold it with much turning and twisting of the body. I have never seen two pewees in the immediate vicinity of the nest, which is saddled on a bare limb and easily seen.—FRANK F. GANDER, *East San Diego, California, May 21, 1927.*

Black Bear Tries to Gnaw into a Woodpecker's Nest.—On June 26, 1927, at 6800 feet altitude, between Mono Meadows and Illilouette Creek in the Yosemite region, the writer found a nest of the Arctic Three-toed Woodpecker (*Picoides arcticus*). This nest was located only four feet above the ground in a large live lodgepole pine. My attention was first attracted to the locality by the unusually vigorous scolding of the parent woodpeckers. A closer approach revealed the cause of the excitement.