



Fig. 1. Compound set of eggs of the Chachalaca. The nest, placed 200 cm. above ground in dense shrubbery, was constructed of twigs and lined with Spanish moss. Note the manner in which the eggs are stacked in the confines of the nest.

The eggs of the large clutch as well as those from three 2-egg and six 3-egg clutches were measured to determine the variability in egg dimensions. The width of the eggs was quite consistent (mean of 40.5 mm. \pm 0.33) throughout the entire sample of 33 eggs; egg length averaged 57.1 mm. \pm 0.67). Egg lengths were accordingly selected to show the variation expected among the eggs of a single female and between clutches (table 1). The 2-egg clutches showed less variation on the average than 3-egg clutches. These data, when compared with the variance of the 9-egg clutch suggests that several hens undoubtedly contributed to the large clutch. Both the longest (61.6 mm.) and the shortest (53.0 mm.) eggs in the sample occurred in the compound clutch.

When first observed on June 11, 1963, the nest with the large clutch contained 8 eggs; these fell into three fairly distinct groups (3, 3, and 2) both in size and in shell texture. The ninth and smallest egg was found in the nest on June 28 on top of the others (fig. 1). This would indicate that four hens likely contributed to the total clutch. Typical of many compound clutches in other species, the nest was never incubated and remained abandoned until collected in July.—RAYMOND J. FLEETWOOD, *United States Fish and Wildlife Service, Alamo, Texas*, and ERIC G. BOLEN, *Rob and Bessie Welder Wildlife Foundation, Sinton, Texas, April 20, 1964*.

Blue Grouse Persists on Mount Pinos in Southern California.—In the last 30 years the endemic form of the Blue Grouse on Mount Pinos, Kern County, California—the race *Dendragapus obscurus howardi*—has been rarely detected and has been feared extinct (A.O.U. Check-list, 5th ed., 1957:126). In this period I have often been in the field on Mount Pinos and on nearby Mount Abel and Frazier Mountain and have searched for the species in vain.

In the period from May 24 to 29, 1964, while collecting on Mount Pinos I heard two grouse hooting in the heavy white fir forest on the northwest slope at about 8700 feet elevation. On a later day I heard a single bird in this area. Inquiry of the California Division of Fish and Game

revealed no record of reintroduction of these grouse in this isolated mountain area.—WALDO G. ABBOTT, *Department of Ornithology and Mammalogy, Santa Barbara Museum of Natural History, Santa Barbara, California, June 11, 1964.*

A Record of the White-winged Dove in Northern California.—On December 27, 1963, I collected a White-winged Dove (*Zenaida asiatica*) at a point approximately ten miles west of Petaluma, Sonoma County, California. The bird was flying alone, although several Mourning Doves (*Zenaidura macroura*) were known to be in the immediate vicinity. This bird is the first of its kind that I have seen in this area over a period of seven years of observations. The tail and wing feathers show no signs of wear similar to those of a bird that might have been caged. The specimen is now in the Humboldt State College collection.

The general landscape of the area of collection includes large sections of grazed pasture, occasional fields devoted to agricultural crops such as hay, and scattered groves of eucalyptus trees. The gently rolling terrain is intersected by a small stream.

This appears to be the second record for this species in northern California. Yocom (Condor, 60, 1958:193) reported a White-winged Dove that was collected approximately four miles northwest of Arcata, California. Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:77) refer to a record of a White-winged Dove that was seen five miles west of Watsonville, Santa Cruz County, in 1939.—RICHARD J. WHEELER, *Division of Natural Resources, Humboldt State College, Arcata, California, May 14, 1964.*

The "Singing Male" Method of Censusing Birds: a Warning.—The method of censusing breeding populations of territorial, noncolonizing species of birds by counting singing males is well known and has been used by ornithologists for many years. In such counts, it is assumed that each singing male is mated and that the count thus reflects the numbers of breeding pairs in the census area. Wallace (An Introduction to Ornithology, Ed. 2, 1963:413) notes that possible sources of error in this method are "that some singing males may not have mates at the time of the count, that duplications may arise by recounts of particularly mobile males, and that some established pairs may be silent at least part of the time." The latter point is of particular importance; a corollary is that the time of day at which the census is made is of critical importance and any deviation from an established schedule of censusing may be disastrous. This is well illustrated by the following data.

Between March 22 and August 18, 1956, I made 44 censuses of singing male Rufous-sided Towhees (*Pipilo erythrophthalmus*) along a stretch of dirt road about three-quarters of a mile long at the Hastings Reservation, Monterey County, California (Davis, Condor, 60, 1958:321, table 6). The purpose of these censuses was not to estimate population size but rather to get an estimate of how widespread singing was in the males at different times of the breeding season. Since there is considerable variation in the relation of time of first singing to morning civil twilight during the breeding season of this species (*op. cit.*:327, fig. 4), and since one's chances of hearing singing males are best in the initial, early morning period of song, one cannot conduct censuses at a fixed time each morning, nor even on a sliding scale according to the daily incidence of morning civil twilight. Rather, one must let the birds themselves dictate the starting time of each census; I started a census when the first male within earshot started to sing his first song of the day. I then made a count of all singing males within earshot on each side of the road from the starting point to the finishing point, and then I immediately reversed the procedure and made a similar count in the opposite direction. The discrepancy between these counts was so great that I presented only the results of the first run in the paper to which I referred earlier.

The total time taken for the round trip ranged from 22 to 41 minutes. However, my performance was far more consistent than these figures suggest. Not considering the five censuses made in August, when no singing male was heard, of the 39 censuses made between March 22 and July 31, 29 took between 30 and 35 minutes for the round trip, and 34 took between 30 and 39 minutes. The mean time for all 39 was 32.8 minutes. This, then, was the mean time that elapsed between my departure from the starting point and my return to it, and it represents the maximum