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

interval between parts of the two censuses. The critical difference made by even the short interval between completion of the first and second runs may be appreciated by the fact that on the first run I noted an average of 7.90 singing males (standard error 0.53) and on the second only 4.79 (S. E. 0.47). Thus there was a considerable, and statistically significant, difference between the mean numbers of males recorded on the two runs. This was true regardless of the period in the breeding season. The first and second run figures for the 14 censuses made during the "heart" of the song season from April 19 to May 31 were 10.64 ± 0.41 and 6.79 ± 0.64, respectively. Similar figures for the 12 censuses made during the earlier and later phases of the census period (three in March, nine in July) were 5.42 ± 0.86 and 2.33 ± 0.57, respectively.

The highly significant difference between censuses made in different periods of the breeding season is well shown by the figures just presented. However, most ornithologists are well aware that song output may wax or wane at different times in the breeding cycle and that such variation can be a major source of error in censuses based on numbers of singing males. On the other hand, field ornithologists may be unaware that a difference of only thirty minutes can influence daily census results in major fashion, even when censuses are made very early in the morning and are timed to a schedule which has been set by the birds themselves.—JOHN DAVIS, *Hastings Reservation, University of California, Carmel Valley, California, June 26, 1964.*

Further Notes on Wandering Tattlers in Central Alaska.—One or more pairs of Wandering Tattlers (*Heteroscelus incanum*) have been known to nest at Eagle Creek in east-central Alaska (65°30′N, 145°30′W) each year since 1956. Observations of breeding tattlers made from 1956 to 1958 were reported earlier (Weeden, Auk, 76, 1959:230–232). The present note records subsequent observations from 1959 to 1963.

General features of topography and vegetation at Eagle Creek were described in the earlier note, as was the nest used in 1957 and 1958. Briefly, the area is a narrow valley, slightly above timberline, in a region of rounded hills rising to elevations of 4000 to 5000 feet. Placer mining activities 20 to 50 years ago resulted in exposure of large areas of gravel along Eagle Creek which

FIG. 1. Wandering Tattler on nest at Eagle Creek, Alaska.