

Our camp was under a large walnut tree at 4000 feet and Cassin Kingbirds had a nest directly overhead in the *nogal*. As we sat at midday working over notes and specimens, I was puzzled for some time by a faint whisper song difficult to locate. It was finally traced to the Cassin Kingbird sitting high in the crown of the tree. My notes made on the spot run as follows: "One of the new items on the Cassin Kingbird is that it has a noon-day whisper song. The regular twilight song, like that of most flycatchers, is a rhythmic repetition of the more common notes . . . This midday song is audible only at a short distance, coming faintly down from the top of the walnut over our camp. It reminds me of the summer song of the Loggerhead Shrike, of vireo-like notes quite musical and continued. We hear it daily at midday (May 7, 1945)." The bird certainly gave the impression of being relaxed and as contented as a purring cat.—LOVE MILLER, *Department of Zoology, University of California, Davis, California, July 27, 1961.*

Comments on the Status of Some Western Specimens of the American Redstart.—On June 23, 1961, a male American Redstart (*Setophaga ruticilla*) in first nuptial plumage was collected in Las Trampas Canyon, Contra Costa County, California. It was first noticed at 8:30 a.m. on June 23 along a census line which had been visited four times earlier in the month, including the previous day. I observed the bird for a total of about 50 minutes on three different occasions extending over a period of 6 hours, and during this time it restricted its activities to within a radius of 150 feet. On all occasions it was in full song while foraging in the foliage of the several tree species common to the broad sclerophyll forest and stream-side willow associations in this region. The vocalizations varied from 4 to 6 songs per minute at 8:40 a.m. to only 2 songs per minute at 2:30 p.m.

The specimen (MVZ 142633) had a completely ossified skull and a heavy accumulation of subcutaneous fat. The right testis measured $5 \times 4\frac{1}{2}$ mm., the left testis, $6\frac{1}{2} \times 5$ mm. The stomach was full of insects: the identifiable prey items were 4 leafhoppers (3 of the genus *Deltocephalus* and 1 *Erythroneura*), 2 melyrid beetles, 1 adult pyralid moth, 1 cantharid beetle, 1 chrysomelid beetle, and 1 spittlebug (Cercopidae). Head-to-tail length of the intact prey varied from 2.5–8.5 mm., the mean being 5.1 mm. ($n = 9$). Judging from the life habits of these insect groups, it seems that most of the food had been either gleaned or flushed from the foliage.

Gross (*in Bent*, U. S. Nat. Mus. Bull. No. 203, 1953) has suggested that the Pacific coast may be an incipient flyway for increasing breeding populations of redstarts in Washington and Oregon. I can find no evidence that these populations are really increasing; the new reports are probably a function of the increased number of observers in that region. Also, the coastal population of southeastern Alaska (Webster, *Condor*, 52, 1950:32–38) would seem a better prospect for such a route. It is more likely that the redstarts observed in the San Francisco Bay Region are vagrants which have followed the coast instead of using the desert flight line (Pulich and Phillips, *Condor*, 55, 1953:99–100; Small, *Audubon Field Notes*, 8, 1954:272). This conclusion is substantiated by their occurrence on the Farallon Islands (Dawson, *Condor*, 13, 1911:182; Bowman, *Condor*, 63, 1961:410) during the same periods with other warblers (*Oporornis agilis*, *Seiurus aurocapillus*, *Dendroica virens*, and *D. pensylvanica*), all of which have breeding ranges east of the Canadian Rockies. The single fall specimen from northern California (Kinsey, *Condor*, 45, 1943:119–120) was trapped at a station which has reported *Vermivora peregrina*, *D. caerulescens*, and *D. pensylvanica* with the same frequency during September (Kinsey, *Condor*, 47, 1945:215; 49, 1947:41–42; 56, 1954:311). In addition, it seems that three of the six spring records (see Grinnell and Miller, *Pac. Coast Avif. No. 27*, 1944:419; Bowman, *loc. cit.*) are late for breeding since the bulk of the population arrives in British Columbia in late May and early June and nesting is well under way by mid-June (Munro and Cowan, *British Columbia Prov. Mus. Spec. Publ. No. 2*, 1947:198–199). In this regard, it is of interest that two out of the three spring specimens are first-year males. From Belding's report (*Land Birds Pac. Dist.*, 1890:222) it is not possible to state whether the redstart seen was fully adult or not. The specimen taken in San Francisco on May 30, 1944, by Merkel (CAS 58488) is definitely a first-year male (see Grinnell and Miller, *op. cit.*).

Phillips' (*Condor*, 49, 1947:121–123) establishment of the American Redstart as a possible breeding species in Arizona on the basis of a male specimen with enlarged testes taken on July 3 seems improbable since the vagrant here discussed was singing, also had enlarged gonads, and was taken at a date late for normal spring migration.

I would like to thank Frank A. Pitelka and Ned K. Johnson for their helpful comments, Paul A. Hurd for determining the stomach contents, and Robert T. Orr for use of the facilities at the California Academy of Sciences.—RICHARD B. ROOT, *Museum of Vertebrate Zoology, Berkeley, California, August 9, 1961.*

Variation in the Red-tailed Hawks of Southern México and Central America.—Until recently, populations of the Red-tailed Hawk (*Buteo jamaicensis*) from southern México to Panamá have been referred to the subspecies *costaricensis* (Hellmayr and Conover, *Field Mus. Nat. Hist., Zool. Ser.*, 13, pt. 1, no. 4, 1949; Friedmann, Griscom, and Moore, *Pac. Coast Avif.* No. 29, 1950; and Friedmann, *Bull. U.S. Nat. Mus.* 50, pt. 11, 1950). Oberholser's description of *B. j. kemsiesi* from Honduras (*Proc. Biol. Soc. Washington*, 72, 1959:159) indicated the advisability of re-examining the available material of the species from México and Central America. Some years ago, I examined and measured the excellent series from Guerrero in the Museum of Vertebrate Zoology. In February of 1960, I was able to examine the specimens of this species at the Museum of Comparative Zoology, the American Museum of Natural History, and the United States National Museum. In addition, I have been able to borrow two birds from the type series of *kemsiesi* from the University of Cincinnati Museum and several birds from the Moore Laboratory of Ornithology at Occidental College. Including the small series here at The University of Michigan Museum of Zoology, I have been able to examine over 80 resident birds, approximately one-half of which were in adult plumage. I am grateful to the curators of these collections for permission to use this material.

In southern México and in Central America, Red-tailed Hawks are birds of the mountains, at least during the breeding season. Two major breaks, the Isthmus of Tehuantepec and the lowlands of southern Nicaragua, divide the highlands of this region into two well-defined segments: the highlands of Costa Rica and western Panamá and those from Chiapas to northern Nicaragua. North and west of the Isthmus of Tehuantepec the highlands are essentially continuous with the Rocky Mountain system.

Red-tailed Hawks from the southern part of this mountain system (Jalisco to Oaxaca) resemble

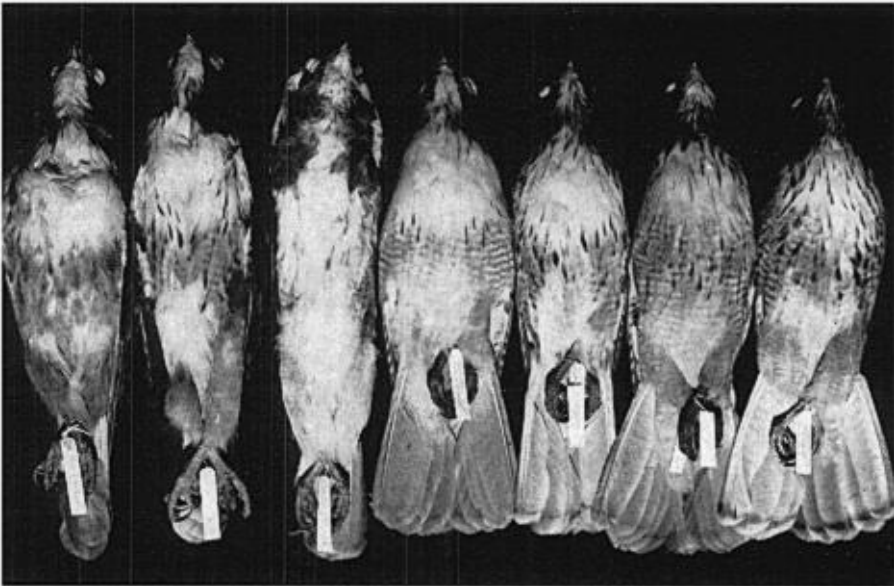


Fig. 1. Adult Red-tailed Hawks from southern México and Central America. Left to right, *Buteo jamaicensis costaricensis*, UMMZ 132072 and 116625 from Costa Rica; *B. j. kemsiesi*, UMMZ 97658 from Chiapas; and *B. j. hadropus*, UMMZ 117225, MVZ 109350 (type), 109365, and 109353, all from Guerrero.