FROM FIELD AND STUDY

Nesting of the Bell Vireo in Oklahoma.—During, June and July of 1960 and 1961, I located 92 nests of the Bell Vireo (Vireo bellii) near Stillwater, Oklahoma. Most previous reports on Bell Vireos have been either detailed observations made of a limited number of birds (see, for example, Nice, Condor, 31, 1929:13–18; Pitelka and Koestner, Wilson, Bull., 54, 1942:97–106; Hensley, Auk, 67, 1950:243–244) or investigations conducted near the limits of the range of the species (Mumford, Wilson Bull., 64, 1952:224–233; Nolan, Condor, 62, 1960:225–244). This report concerns a fairly large number of birds in an area that is well within the limits of the range.

Various measurements concerning the nests are given in the table. All nests were constructed of blades of grass, principally little bluestem (Andropogon scoparius), reinforced with tree leaves and lined with fine grass stems, principally switchgrass (Panicum virgatum). In addition, cocoons were used in 56 per cent of the nests, paper in 39 per cent and snakeskins in 11 per cent.

LOCATIONS AND DIMENSIONS OF BELL VIREO NESTS

Locations of 92 nests:	Mean	Range
Height of nest (in.)	36.9	20-144 ¹
Height of host vegetation (ft.)	12.2	2.5-30
Clearance below nest (in.)	27.3	6-63
Clearance above nest (in.)	10.4	2-72
Distance from trunk (in.)	27.8	6–72
Distance from margin (in.)	19.6	3-78
Dimensions of 67 nests:		
Inside diameter (mm.)	43.6 x 47.7	40 x 40-51 x 52
Outside diameter (mm.)	57.7 x 63.3	54 x 54-65 x 73
Inside depth (mm.)	41.6	32-50
Outside depth (mm.)	63.0	50-86

¹ Only one nest was higher than 66 inches above the ground.

Of the 61 completed nests whose histories were known, 29 (48 per cent) hatched at least one egg, and 19 (31 per cent) fledged at least one young bird. From a total of 173 eggs, 78 (45 per cent) hatched and 47 (27 per cent) produced fledglings. Eighteen (30 per cent) of the nests were parasitized by the Brown-headed Cowbird (Molothrus ater). Two of these nests fledged a total of three cowbirds.—Thomas G. Overmire, Zoology Department, Oklahoma State University, Stillwater, Oklahoma, August 2, 1961.

High-noon Songs.—The stimulating article by Leopold and Eynon on dawn and evening singing (Condor, 63, 1961:269-293) deals only with the half-light songs of those diurnal birds which are discussed and it correlates inception of various performances with the factor of light intensity, leaving out air temperature as a possible influence on the nature of a bird's performance. These random field notes are offered as of possible value in stimulating more accurate study of temperature relations. From boyhood days in southern California I have associated a certain type of song of the Loggerhead Shrike (Lanius ludovicianus) with the hot, still air of midday in summer. Quite in contrast with the monotonous rhythmic song of the spring period, this summer song is a more continuous warble of reduced intensity, although not so low as to class it with whisper songs. But the structure of the song is much the same as that of the whisper song. It strongly resembles certain subdued songs of the Mockingbird (Minus polyglottos). So much so that in my less discriminating boyhood I claimed that the shrike was a pretty good mocker. Some have considered this performance to be a song of immaturity. Perhaps it is. My own tendency is to recognize a "meditative" song, which may be primitive and juvenile as well, but to which the adult bird may revert at times of reduced ecstacy. At midday, well fed from the morning's activity and relaxed by a high temperature, the shrike sings from the midst of a tree what I have called a song of contentment.

The tyrannid flycatchers do this same thing. The Cassin Kingbird (Tyrannus vociferans) surprised me with such a song during one field trip into the Pajarito Mountains of southern Arizona.

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.—Loye 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.