

double-barreled shot gun, an auxilliary, and a rifle if you can, but many of us cannot go on expeditions. To the one who travels "light", this brief discussion is addressed.

I am indebted to Dr. J. Grinnell and to Mr. Joseph Dixon for advice on the use of Ballistite.

Los Angeles, California.

FURTHER REMARKS UPON THE KERN RED-WING

By JOSEPH MAILLIARD

AS STATED in the description of the Kern Red-wing (*Agelaius phoeniceus aciculatus*) in THE CONDOR, vol. xvii, p. 13, the dates on which the specimens therein mentioned were taken (which were May 27 to June 7) were rather late in the season, and on account of the fading and abrasion of the plumage, which deteriorates rapidly as midsummer approaches, these specimens were not in the best condition for satisfactory comparison with other forms of *Agelaius*. This year (1915), for the purpose of procuring specimens in fresher plumage, a short trip was made by the writer at a somewhat earlier date into that part of the Kern River valley where these birds were found the previous year by A. van Rossem. As it was desirable to avoid the complication of migrations, the latter part of April was chosen as the safest period and a time when migration would be over and local breeding begun.

Dr. Barton W. Evermann, Director of the Museum of the California Academy of Sciences, participated in this expedition, and thanks are due to him not only for his genial companionship but as well for great assistance in procuring specimens, though his main object was botanizing. Specimens of *A. p. aciculatus* were secured on April 17, 18 and 19, and were in much better condition for study and comparison than was the material procured the year before, and from which this form was described.

The study of this new material confirms the conclusions before reached, and also develops the fact that as late as the above dates in April, at least, the middle wing-coverts of the males are apt to have a heavy black tipping. Of twelve males secured eight had all the feathers of the middle wing-coverts tipped with black, some of them quite heavily, three had all but one or two so tipped, while on the remaining specimen the tipping had been worn off on all but two of the feathers. Judging from this, it is reasonable to suppose that still earlier in the spring all the feathers of the middle wing-coverts are tipped with black, and probably rather heavily.

Only twelve males and four females of this form were obtained and among these were no special deviations from the measurements already given in the original description, with the exception of the culmen-from-base of one of the females extending the maximum of this measurement to 24.6 millimeters, in place of the former extreme of 23.9. No minimum extremes were altered by this additional material though the averages of one or two measurements varied slightly from those given in the tables, but not sufficiently to make any practical difference. For instance, the average length of culmen from base in the case of these twelve males is less than that of the twenty-one males

given in the tables, this being caused by a larger proportion of the twelve being under rather than over the average before given, though none fell below the former minimum. On the other hand the average of the same measurement in the four females was greater than that of the eleven females given in the published tables, and the maximum was exceeded. Yet if the two lots had been combined the figures given before would be changed but very slightly. We know that the smaller the number of specimens measured in groups the more the measurements will vary, so this small deviation was to be expected.

These birds were so scarce, and the area in which they were to be found apparently so limited, that it seemed a pity to destroy more than necessary, and what we obtained were enough to sustain the conclusions heretofore reached. Also if this form is as sparsely represented as it appears to be, it seemed unfair for one collector to make so great an inroad into its numbers as to endanger its existence. Hence our weapons were turned away and no more specimens collected.

That the habitat of the Kern Red-wing is extremely limited seems, from our present knowledge, to be a reasonable conclusion, even though it is known to inhabit two districts rather widely separated topographically. The first place where it was found was the "Walker Basin", which is a meadowlike valley of only a few thousand acres in extent, separated from the San Joaquin Valley by a range of mountains over four thousand feet high, its only outlet being by way of a narrow gorge through which the Walker Creek flows into the Kern River, whose bed is at the bottom of a narrow canyon for miles below the point of intersection. The marshy portion of the Walker Basin is so limited that but few individuals exist there. In fact we saw none at all while passing along the edge of this district, but van Rossem took some there in 1914.

As far as we know, the next, and only other, spot where these birds are to be found is on the South Fork of the Kern River, some four or five miles above its junction with the North Fork, twenty-five or thirty miles farther inland than the Walker Basin and separated from it by two fairly high ranges of mountains, the river itself being probably at an elevation at this point of some 3000 feet. Here the narrow valley opens out a bit, to half a mile or more in width, with "fans" covered with desert vegetation running up into the steep canyons that cut into the masses of shattered rock which constitute the mountains on either side. In the comparatively level bottom are small marshy spots and lagunas where bunches of tules or cat-tails grow, while in places water has been brought in from the river and alfalfa or barley is grown.

We found the red-wings mostly in the lagunas, or near them, though some were seen among the hundreds of Brewer Blackbirds (*Euphagus cyanocephalus*) which were following the water as it spread over the fields and feasting on the insects among the alfalfa. The red-wings were usually in small groups or colonies, and far from numerous. In fact we came across but few spots they seemed to favor by their presence. This irrigated strip extends some eight or ten miles up the river to where the valley contracts again and it seems to be the only likely locality in which to expect these birds in all that neighborhood. Inquiry among the ranchers and stockmen living in the valley, the passers-by, and even the indians who are quite numerous there, elicited no information as to any conditions conducive to the presence of red-wings up or down either of the forks of the Kern River, and all who claimed to know

anything of the topography of the country thereabouts asserted that all the valleys were narrow and rocky, with no marshy places nor lagunas of any extent anywhere in those ranges of mountains except just where we were collecting—that is, between Isabella and Onyx, on the South Fork of the Kern.

San Francisco, August 16, 1915.

NESTING OF THE WHITE-TAILED KITE AT SESPE,
VENTURA COUNTY, CALIFORNIA

By LAWRENCE PEYTON

WITH TWO PHOTOS

IT WAS in the spring of 1913 that a pair of the beautiful but fast vanishing White-tailed Kites (*Elanus leucurus*) was first seen in this vicinity. My brother Sidney saw the birds carrying sticks to a nest in a eucalyptus tree

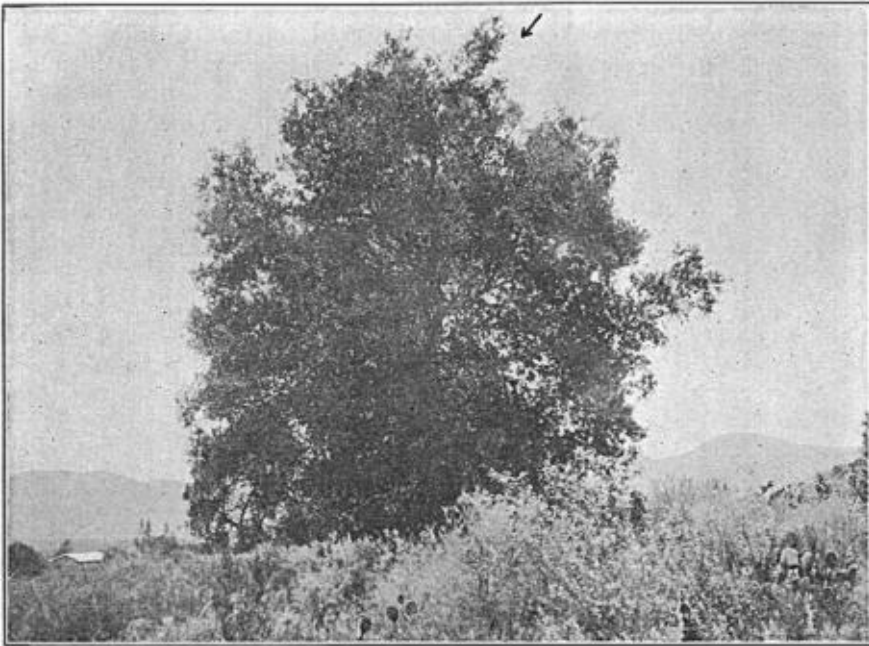


Fig. 77. NESTING SITE OF WHITE-TAILED KITE NEAR SESPE, VENTURA COUNTY, CALIFORNIA. ARROW POINTS TOWARDS NEST.

in the willow swamp about three-quarters of a mile east of home. This nest was not completed, however, probably owing to the persecutions of the Crows.

In 1914 a pair of Kites, probably the same ones, were again located in the willow thickets about two miles farther west, but all efforts to find the nest failed, and it was not until this year that our search was rewarded. On April 22, my brother Sidney, while after bluejay's eggs saw a Kite fly from a nest in the top of a small oak tree about one-half mile north of home. On climbing to the nest, which was about 18 feet above the ground, he found it contained three young about a week old and an addled egg, which latter he took.