## FROM FIELD AND STUDY

Sunlight and Shadow.—Since we put away the gun and took to the field-glass I wonder if many a doubtful bird on our local lists, admitted solely upon field-glass observation, could not be traced to the effect of sunlight or shadows. While doing a little collecting recently in the winter woods of southeastern Arkansas this was brought home to me as never before.

The man with the field-glass finds the sunshine one of his greatest drawbacks to identification. It is a good thing to have light on a subject but a very unsatisfactory condition to have a glare of brilliant sunlight on a bird we are endeavoring to identify. And should it be necessary for us to look directly toward the sun, we may find the identification of the species well nigh impossible. What a gorgeous plumage a little sunshine can impart to some dull feathered and commonplace bird! The bird-man afield often finds it necessary to work under conditions that are far from ideal. It is not always possible to keep one's back to the sun and it is generally at the least expected and unprepared-for moment that the prize of the day appears, A living bird is an active creature and rarely is it so accommodating as to sit still long enough for us to make out every detail of its plumage. Possibly ninety-five times out of a hundred our bird moves on before we have clearly seen that one sure identification mark. If we are fortunate we may be able to follow it and observe it under more favorable conditions. but the chances are that we have seen the last of it for that day and we have just seen enough to set us guessing. It may be that we caught but a fleeting glimpse of it, or we may have had it under observation for a few seconds, but because of some projecting twig we have failed to see that much desired field mark, No doubt we can name its family and perhaps we are almost certain about its species. We saw enough to be all but positive and it takes but a freak of light or shadow to supply that one half hidden spot.

One trouble is that we are too apt to look for the rare and unusual in the bird we meet. We should curb our enthusiasm and imagination and treat every bird we see as the common and to-be-expected species for our locality until we have *proven* it to be otherwise, and when the identity lies in some minor detail, the proof should always be the bird in the hand.

In the cause of accurate observation it might be a good thing if every field-glass student could use a gun at least a few times in his or her life. A gun makes one sceptical and thereby careful. When you identify a bird as this or that with the glasses and then shoot it and find it to be something different, it brings home to you as nothing else can, how very easy it is to be mistaken. I believe that most collectors have had such an experience.

The field-glass observer is often hurt because someone doubts his accuracy in identifying some unusual bird, but no one realizes better than the man who has collected, what an easy thing it is to misidentify a bird, and when the identification rests on some minor point, it is little wonder that he questions it. I believe my own field-glass lists would be larger had I never collected. Many is the bird I leave off my list whose identity I am all but *positive* about.

Down in Arkansas one day I saw a Hooded Warbler; I identified it with the field-glass, but my gun transformed it into a Black-throated Green Warbler, and no one could have been more surprised than I. The sunlight or the shadows had played me a trick.—Chreswell J. Hunt, Chicago, June 2, 1920.

How Fast Can a Roadrunner Run?—The Roadrunner has gained the reputation of being swift of foot, but is its reputation based on actual swiftness, or merely on the fact that the bird gets from place to place by the conspicuous use of its legs? In his article on "Habits and Food of the Roadrunner in California" (Univ. Calif. Publ. Zool., vol. 17, 1916, p. 27) H. C. Bryant quotes from Heermann that the Roadrunner "may . . . be overtaken when followed on horseback over the vast open plains" and that Heermann "once saw one captured by a couple of dogs." If these statements are accepted, as they will be by most people, not for what they literally say, but for what they imply in regard to the speed of the Roadrunner, they are calculated, I fear, to give one a slightly

exaggerated impression. In describing how fast mice can scoot I could, with a dishonest sort of truthfulness, state that I have seen them run down by automobiles going at sixty miles an hour.

On July 21, 1919, H. G. White and I were travelling by Ford down the Arroyo Seco Canyon, Monterey County, California. Rounding a curve at very low speed we surprised a Valley Quail in the road. Like the Irishman on the track in front of the onrushing locomotive, who said his life would be saved if he reached the switch first, our quail seemed to figure that its only salvation lay in outsprinting the Ford down the road. We gradually increased our speed till the bird was pressed to its utmost and could no longer gain on us. At this stage of the race our speedometer registered 12 miles an hour.

Next day, when en route from Soledad to the Gabilan Range via Stonewall Creek, we had exactly the same experience with a Roadrunner. At the top speed to which we provoked our victim, the famous runner was moving at the tremendous rate of 10 miles an hour on a practically level piece of road.

These two records would be more conclusive if backed up by others of the same kind. Both birds, however, seemed to be able-bodied adults with nothing the matter with their legs, and their speed, it seems fair to believe, must have been not far from average. It would nevertheless be of interest if other ornithological motorists could make similar tests. Considering the propensity of both the Roadrunner and the Valley Quail for getting in the road ahead of machines and trying to beat them to the next turning-off place, it ought to be possible for observers to gather some data on the subject. Is the Quail really swifter than the Roadrunner? Have we any bird swifter—or less slow—than either? For example, how about the Ring-necked Pheasant (*Phasianus torquatus*), or even the barnyard rooster, when urged?

It might be in good order here to urge again the opportunity offered motorists for testing the speed of birds in flight, as already discussed by Alexander Wetmore (Condor, xvII, May, 1916, pp. 112-113). It is of common occurrence for birds, scared up at the roadside, to fly long distances just ahead or abreast of the machine. Some seem to imagine they are thereby escaping from danger. Others act as if they considered the thing a sort of game. That suggests another idea: do birds have a game-playing instinct or capacity?—Richard Hunt, Museum of Vertebrate Zoology, Berkeley, California, June 11, 1920.

Notes on Some Birds of Santa Cruz Island, California.—Through the courtesy of Mr. F. Caire of San Francisco, the writer was enabled to spend from January 22 to January 26, 1920, on Santa Cruz Island. The following additions to Mr. A. B. Howell's excellent paper on the Birds of the Channel Islands may be of interest.

Zonotrichia leucophrys nuttalli. Specimens of this subspecies, put by Mr. Howell in the hypothetical list, were taken and identified by Mr. L. E. Wyman. The subspecies seemed about equally numerous with Z. l. gambeli.

Hylocichla guttata guttata. A small dark Hermit Thrush was taken and sent to Mr. Swarth. The skin reached him in poor condition, but he writes that he believes it to be the Dwarf Hermit Thrush. This subspecies was also placed by Mr. Howell on the hypothetical list.

Telmatodytes palustris plesius. A single Marsh Wren taken at Prisoner's Harbor in the only patch of cat-tails seen on the island, was identified by Mr. Wyman as of this subspecies. It has not before been recorded from Santa Cruz Island.

Geothlypis trichas scirpicola. A female of this subspecies of Yellowthroat was taken in the same patch of cat-tails at Prisoner's Harbor. It has not before been recorded from the island.

Sialia currucoides. Mountain Bluebirds, not before recorded from any of the Channel Islands, were observed in three different localities. A scattered flock of over twenty were hovering and feeding on the mesa near Black Point at the west end of the island. Another small flock was seen near the ranch house at the west end, and two birds were seen in the pines in the central part of the main valley.

Nucifraga columbiana. Clark Nuterackers were reported in the winter of 1919-1920 from many points near the coast, but it is nevertheless surprising that they crossed the twenty-six miles of channel and reached Santa Cruz Island. The birds, called Jack-