

FROM FIELD AND STUDY

On the Acorn-storing Habit of Certain Woodpeckers.—In a recent article in the CONDOR, Dr. William E. Ritter gives an interesting discussion of the habit of the California Woodpecker of inserting acorns and sometimes pebbles into small holes drilled for their reception in the bark and dead wood of trees. During a two years stay in British Honduras the writer had a good opportunity to observe this same curious instinct in a closely related form, *Melanerpes formicivorus albeolus*. These extremely industrious birds not only store acorns in the same manner as the California Woodpecker, but also deposit them in great quantities in hollow trees and similar places. I have seen a hollow pine tree with a cavity six to eight inches in diameter filled for a distance of nearly twenty feet with acorns dropped into a good sized hole at that distance above the ground. Acorn-filled trees of this sort I found not uncommon. Sometimes an opening at the bottom showed the earlier acorns deposited, completely decayed and crumbling to dust. They must have been there for several years, and probably were not brought by the same birds that completed the accumulation. I often saw the woodpeckers bring the acorns and drop them into these "acornaries".

I lived for some time in an old house in which the roof of an upper veranda had been supported by timbers six inches square. These had been injured by termites and rendered unsafe, and had then been boxed with heavy boards of the proper width. Later the termites had completed their work of destruction and had almost entirely removed the timbers, leaving the hollow boxing. The woodpeckers had made holes near the tops of some of these and used them for acorn storage. One that I noted was filled for a distance of at least four feet, as could be seen where the boards had sprung apart slightly, and possibly much farther.

In these cases it would be utterly impossible for the birds ever to make use of the acorns in any way, yet they go on generation after generation laboriously gathering them. Furthermore, in an even, tropical climate like that of British Honduras, where there can be but little variation in food supply from season to season, it is difficult to see how, under any circumstances, such a habit could be of any great advantage; but even granting that it is so in cases where the accumulation is accessible, these instances show how an over-developed instinct may lead to actions not only useless but highly absurd.

So far as the California Woodpecker is concerned, Dr. Ritter's conclusions are in all probability correct. This suggests the possibility that the Central American bird was derived from the more northerly form or from northern ancestry, which acquired the instinct under conditions like those now existing in California, and that, as it pushed gradually into the tropics, it retained the instinct long after it had ceased to be of any utility. Such speculations, however, are of doubtful value.—MORTON E. PECK, *Willamette University, Salem, Oregon, June 8, 1921.*

The Brown-headed Nuthatch in Oklahoma.—The Brown-headed Nuthatch (*Sitta pusilla*) does not seem to have been heretofore recorded from Oklahoma. On July 5, 1920, I saw one bird of this species on a southern yellow pine near Cedar Creek in Pushmataha County. Although the specimen was not taken, there could be no doubt as to its identity since I had ample opportunity to study the bird at close range through field glasses; and, moreover, this locality is well within its expected range, as it has been found in Texas, Arkansas and Missouri.—MARGARET M. NICE, *Norman, Oklahoma, April 7, 1921.*

The Water Ouzel in Arizona.—The scarcity of published records of the occurrence of the Dipper, or as I would personally prefer to call it, the Water Ouzel (*Cinclus mexicanus unicolor*), in Arizona seems to make it desirable to add to these records. On first coming into southern Arizona a few years ago from a locality where I had come to know this bird well and to expect it along the tumbling mountain streams, I confidently looked for it along the principal permanent stream in the Santa Catalina Mountains, but was disappointed. It did not appear to be present either in the lower portion of this canyon (Sabino) or along the headwaters and upper stream where the eastern brook trout has been successfully introduced, and where conditions appeared

to be favorable for this stream-loving bird. Its absence from the Herbert Brown collection, now in the University of Arizona Museum, led to looking it up in Swarth's "Distributional list of the Birds of Arizona" (Avifauna No. 10) where the paucity of published records is noted. Thereafter, whenever opportunity offered, I have attempted to locate this species.

My search was first rewarded in June, 1917, when, on a fishing trip to Oak Creek Canyon eighteen miles south of Flagstaff, I was delighted to see my old friend of former years. At least two individuals were noted, but as they flew back and forth up and down stream all during the day of sport they seemed like a dozen. The number was not possible to estimate accurately except by laying off the trout fishing, which was even a rarer treat in Arizona than the sight of the Water Ouzels; but I should say there were not more than one or two pairs in the portion of the stream fished. While no nest was discovered, the conditions were so favorable and the birds so evidently at home, that I doubt not they breed there.

I did not personally see this species again until June 13, 1920, when the day was spent in Sabino Canyon. During the day a portion of the canyon some two miles in length, from eight to ten miles up from the mouth, was explored, and in the course of the day two birds, presumably a pair, were seen. No evidence as to their nesting was obtained, though from the general non-migratory character of the bird one would assume that they were at home, and especially at that time of the year. (In Utah the Dipper may be seen at any time of the winter along the rushing and consequently unfrozen parts of the streams of the Wasatch Mountains). That portion of the Sabino explored last June lies between the upper and lower portions which I had previously seen, and it is quite possible that in this portion the bird may be a regular resident. If this be true then we have a resident pair of Dippers within twenty-five miles of Tucson.

In the meantime I had talked of this bird to Mr. M. E. Musgrave, Predatory Animal Inspector of the Biological Survey for Arizona, suggesting that he be on the lookout for it in his more extensive travels about the State. Mr. Musgrave now kindly furnishes the following Arizona records:

"During the year 1918 along Oak Creek; also during the same year along the Black River and its tributaries east of Fort Apache, Arizona; and one on Beaver Creek near Montezuma's Well, north of Camp Verde. In June, 1920, along the White River, about ten miles east of Cooley, and a few days later two pairs nesting on a small creek known as Trout Creek, which is a tributary of White River and which comes in southeast of Cooley about five or six miles; also in the same month several of these birds along White River south as far as the Indian Saw Mill, below Cooley about ten miles. On February 1, 1921, one on Lime Creek, a tributary to the Verde River, about forty miles north of Phoenix."

Taking these records in connection with those gathered by Swarth, it seems reasonable to assume that the species under consideration occurs rather commonly along the mountain streams of the northern and northeastern high plateau and mountain region of Arizona, while its occurrence in the ranges of the southern part of the State is either sporadic or limited to a few individuals here and there along the most favorable streams, there being at present one record each for the Huachuca, Chiricahua, and Santa Catalina mountains. The streams in the Catalinas and Santa Ritas, and probably also in the Rincons, are decidedly barren of such aquatic insect nymphs as Plecoptera (stone flies) and Ephemera (may flies), on which the Utah Dippers appeared to me to feed largely. These streams are also rather barren of caddis worms (Trichoptera larvae) which would seem to offer a good food supply for these birds, but on which I have not actually observed them feeding.

After the above was written, but before mailing the manuscript, I had occasion to again visit Sabino Creek at the point where the two birds were observed last June. It was with the keenest pleasure that I again noted on that date, March 22, 1921, the presence of two individuals of this species at the precise pool where I first saw one in June, 1920. These two kept in close company and are doubtless a resident pair. If opportunity permits, an attempt to discover them nesting will be made this season.—
CHARLES T. VORHIES, *Tucson, Arizona, March 30, 1921.*