

FROM FIELD AND STUDY

Field Notes on the Raven.—While on the north end of Catalina Island April 6 to 9, 1925, I was enabled to observe at leisure some of the breeding antics of the Western Raven (*Corvus corax sinuatus*). A large flock that was gathered there gave daily aerial and vocal exhibitions. The most striking effect was produced by the vocal abilities of these usually croaking, growling dignitaries. When a flock of some numbers would be playing in the air in a general sort of melee, a high pitched clamorous cawing, very crow-like, was the usual thing. Lower voices were heard, in the quality and burring utterance of the nutcracker. Single pairs gave rapid runs (on an upward scale) that had a ringing quality, of wooden nature, like castanets, and were musical enough to remind one of the xylophone.

Another peculiar sound was made in a number of instances by a bird when completing the "roll". Upon reaching upright position such birds made a sharp "pugh", very like a cork drawn from a bottle. My first impression was that it was the result of a certain wing-flash in gaining position; but later, birds in ordinary flight gave the same note, so I concluded it was vocal. Another puzzle was the "whiff, whiff" of steady-flying birds. It was so strong and distinct a sound that a single bird flying down the valley awakened me on two different mornings by this sound when still at a considerable distance. Mr. M. W. deLaubenfels expressed himself at the time as thinking this a volitional effect, as numbers of times a pair of birds would go overhead and only one be giving the sound. Could it be a sexual characteristic?

Ravens formerly did great damage to the sheepmen on this island by picking out the eyes of new-born lambs. The lambing fields were always guarded by armed men. Today, however, there are very few sheep on the island. One of the ranchers told me that the ravens do not do the same damage to the young kids of the goats, of which there are thousands on the island, for the reason that the nannies are more agile than the ewes and keep the birds away. Mr. Arthur Barr found a circle of ravens around an American Eagle feeding on the carcass of a goat he had recently killed. They gave the eagle some bother but made no united attack. This same observer and his father called my attention to the probability of ravens eating cactus apples. They found the remains, and also whole apples freshly punctured, upon conspicuous elevations such as a raven might use. It is almost certain that they do, for the ripened fruit can be found fallen in the midst of nearly every cactus thicket, each one with a puncture such as the bill of the raven might inflict.—ROLAND CASE ROSS, *Dept. of Nature Study, Los Angeles City Schools, May 10, 1925.*

Segregation of the Sexes in the Sage-hen.—Sage-hens (*Centrocercus urophasianus*) are still numerous in northwestern Colorado. They breed in all favorable places in Routt and Moffat counties and then assemble in large flocks during the winter months. I have been told that their center of abundance during the winter is in the general vicinity of Craig and Sunbeam, where they congregate on the great sage flats. During this time they are often entirely absent in places where they were common in the summer.

I worked from the Cary Ranch (about on the border of the two above mentioned counties) in February, 1925, and noted the tendency of the Sage-hens to gather in flocks according to their sex, as do the Willow Ptarmigan in Alaska. As with the ptarmigan, it was not unusual to find a few males in a large flock of females, and vice versa, but for the most part the flocks were of but one sex. The birds wintering immediately about the Cary Ranch, which is in the valley of the Bear River, were almost entirely females.

The Bear has a rather narrow basin with the usual growths of cottonwood and willow, while the hills sloping abruptly from the valley floor are clothed with sage. The snow was about two feet deep on the level, which made work a trifle difficult; but in the week afield, I had no difficulty in seeing Sage-hens daily. There were no large flocks along that part of the Bear, as the majority had worked to the northward. Of the hundred or so noted but a few were males. On the Elk River, which empties into the Bear nearly on the Routt and Moffat county line, I found the flocks composed almost entirely of males. The Fortification Flats, across the divide to the northward

of the Elk, were spoken of by the ranchers as a famous wintering ground of the "chickens". These birds find a broad valley with a southern exposure to their liking and there spend the winter as long as food conditions are favorable.

Owing to the inaccessibility of the region in discussion, and to the closed season in Colorado, I am told the Sage-hens have been holding their own. The farmers kill a few in the fall, but the birds are pretty well protected for the most part. A short open season for the Sage-hens in Colorado is now under discussion, but my experience is too limited with this species to venture an opinion on the advisability except that a continued closed season would surely do no harm. I should be sorry to see this last stronghold of the Sage-hen in Colorado invaded by gunners.—ALFRED M. BAILEY, *Colorado Museum of Natural History, Denver, Colorado, April 17, 1925.*

An Early Account of the Birds of Lake Merritt, Oakland.—I am prompted by Mr. A. S. Kibbe's interesting statistics on the occurrence of water birds at Lake Merritt in the March issue of *THE CONDOR* (p. 55) to give an account of an early paper bearing on the same subject, which has but just come to my attention. Reference was made in the November, 1924, issue of *THE CONDOR*, in the editorial department (p. 234), to the thrill that comes to a bibliographer in discovering a new title. This is quite comparable to the thrill that comes in discovering a new species—or, nowadays, a new subspecies! In the present connection I have only recently, for the first time, seen the article of the following title; and I have experienced that thrill.

1876. Nelson, E. W. Birds Observed in the Vicinity of Oakland, Cal., December 23, 1872. *The Scientific Monthly* [Toledo, Ohio], 1, February, 1876, pp. 232-234.

Even though Coues, in his bibliography of 1878, gave the above title, I had not included it in either of my installments of California bibliography—for the reason that I had never, myself, had access to this particular "Scientific Monthly", which series was evidently an ephemeral one. In other words, the above title is brand new to my personally gathered "collection" of California titles.

The general interest in this article of Dr. Nelson's, setting forth field observations of 53 years ago next December, is that it relates to a locality which is now almost in the heart of a big city. Incidentally, be it noted, Dr. Nelson was at that time a youth of but a few months passed 17 years of age. But he was an observant youth; and he put down in this article, when preparing it for publication four years later, much of just the sort of information we would like to have in comparison with avian conditions in the vicinity of Oakland today.

The article in question is a narrative account occupying most of three printed pages. Birds are designated usually by both their common and scientific names, the latter, some of them, rather curious in comparison with those in current use today; for example: "*L[arus]. delawarensis* var. *Californicus*", for the California Gull—as if the California Gull were a subspecies of the Ring-billed. The names used were of course not novel with Nelson, but were such as Henshaw, Ridgway, Coues and other active ornithologists of the day were employing.

A total of 28 species of birds are thus formally mentioned; and just one day of observation is covered, December 23, as indicated in the title. Young Nelson and a friend, "Mr. W. Wentworth", spent "the principal portion of the day . . . on an arm of San Francisco Bay and the adjacent marshes, which are extended along south of Oakland. . . . The only timber to be seen was the belt of oaks extending along near the bay, and in the midst of which, the town [Oakland] is situated."

"On the edge of the town we found a small lake made by building a dam across the outlet of an arm of the bay, which extended back a mile or more from the main body of water. This lake [Lake Merritt, of course] appeared to be the home of numerous water fowl, notwithstanding there were several residences on its banks and a much frequented [true today!] road extending along one side." . . . "On the shore near by a flock of Semi-palmated [=Western] Sandpipers . . . ran nimbly about, and on the opposite shore a White Heron . . . stalked sedately along."

White Pelicans and Eared and Pied-billed grebes were also seen, and their appearance and behavior are described. Furthermore, "in the centre of the lake a large flock of ducks were splashing about, seeming to well understand that they were under the protection of the law." Thus, reference is made to the fact that Lake Merritt was then already a protected resting ground for ducks, having been set apart, in 1869, as the first California State Game Refuge.