

in the lee of a strip of willow scrub, combating the wind and preparing specimens. We heard some Fulvous Tree-ducks while here, and saw half a dozen Farallon Cormorants, many Ruddies, a few Redheads (*Marila americana*) and quite a number of unidentified ducks.

An early start the next morning enabled us to reach Los Angeles before nine o'clock.

NOTES ON CERTAIN KANSAS BIRDS

By ALEX WETMORE

THE EFFECT of the severe winter of 1911-12 on bird life in eastern Kansas is shown by the great scarcity the past fall (1912) of *Dryobates p. medianus*, heretofore one of the most common birds. In the vicinity of Lawrence, from October 12 until November 10, only three of these birds were seen, while in previous years it was nothing unusual to see thirty, forty or even more during a day spent along the streams, and in the creek bottoms. After the tenth of November, at which time weather conditions became more severe in the north, the cold extending even to Kansas, these birds became fairly common again, migrants arriving from the north to spend the winter in the comparatively warm climate of this region.

From these observations we may deduce that, in the area under discussion, there are two groups or "races" in the subspecies *Dryobates p. medianus*: the one purely resident and local, and the other composed of migrants from the north, each being distinct, though inseparable apparently in terms of color or relative measurements. The local, or strictly resident, downy woodpeckers then were almost exterminated by the long-continued cold, protracted storms, when the trees were sheathed in an icy coat, and deep snows of the winter, while the northern birds found in this region merely as winter visitants—birds that of necessity must be considered stronger and more hardy—escaped with fewer mortalities, and were in the spring enabled to return northward and recoup their numbers.

It was interesting also to observe the change in relative abundance in the larger woodpeckers. *Dryobates v. villosus*, usually found in small numbers, was actually common, and *Colaptes a. luteus* likewise had greatly increased. *Centurus carolinus* on the other hand had decreased, being absent from many localities where it was formerly common. The latter is here a strictly resident species, there being no change in its relative abundance between winter and summer, while the other two species have their numbers considerably augmented by migrant birds from the north in the late fall. The larger *Dryobates* and *Colaptes*, then, seem better able to cope with the stringent conditions imposed upon them and even to increase, perhaps in the case of the Hairy Woodpecker, through being relieved of competition with the smaller species of the same genus.

Certain other species were affected noticeably also, for example *Thryothorus ludovicianus*. Since 1905, when observations were begun by the writer in the immediate vicinity of Lawrence, this species has been increasing in numbers, pushing back into the hills, following the brush-covered creek banks, and dry ravines, and steadily, year by year, encroaching upon new territory. During the

present fall, however, but one bird was noted, a male seen along the Wakarusa River, in a locality where the species is usually fairly common; and none were seen in the territory recently occupied by them.

Wintering birds of *Nannus h. hiemalis* seem also to have been almost completely wiped out, none being observed, though careful search was made for them in localities where formerly they were common.

Cardinalis c. cardinalis alone among the Fringillidae seemed to have suffered loss, the birds being rare until the first of November when their numbers were augmented by migrants from the north. Large numbers of quail were killed also in this locality, but recovered through favorable weather during the early breeding season. In the western part of Kansas conditions were much more severe, and it is reported that Prairie Hens and quail were almost entirely exterminated, and that even the jack rabbits have almost entirely disappeared.

These observations would seem to emphasize the well known fact that within a single species or subspecies of bird we have divisions or groups, resident or migrant, as the case may be, within certain defined limits; and when one of these local groups is through any cause greatly lessened in numbers, it regains its former abundance mainly through the increase of the survivors, though slight gains may come through the encroachment of others of the same species from unaffected neighboring areas where competition between the members is severe enough to cause them to seek new haunts.

SOME NOTES ON THE NESTING OF THE SHORT-EARED OWL

By ARETAS A. SAUNDERS

WITH ONE PHOTO BY THE AUTHOR

DURING the nesting season of 1912 I spent most of my spare time on an area lying about half a mile southeast of the town of Chouteau, Montana. This area consisted of open grassy meadows crossed by a small creek, cottonwood groves along the edges of the creek, and a large area of brush land, overgrown with shrubby cinquefoil, wild rose bushes, and a few scattered willows, buffalo-berry bushes and other shrubs. This brush area formed the nesting ground for a good many birds. Mallards, Sharp-tailed Grouse, Clay-colored Sparrows and a colony of Brewer Blackbirds nested in or beneath the cinquefoils, and in the thickest part of the brush I found the nest of a pair of Marsh Hawks. During the latter part of May and early in June I frequently saw a Short-eared Owl (*Asio flammeus*) sitting in the top of a dead willow bush that was near the Marsh Hawk's nest. I began to suspect that this bird, too, had a nest in the vicinity, but when I searched near the bush, the bird merely flew to a tall dead cottonwood on the border of the creek and sat watching me, giving no sign to show whether his nest was near or not.

Finally, on the evening of June 10, I extended my search to a new part of the brush area, a good 150 yards from the willow bush and still farther from the cottonwood tree. I soon noticed that the owl had left his perch and was hovering overhead watching me. As I went farther in that direction he circled lower over my head and called anxiously a low, short, hoarse note that sounded to me