- CAROLINA WREN (Thryothorus ludivicianus ludivicianus).
 Common.
- 93. Bewick Wren (Thyomanes bewicki bewicki). Common.
- 94. WHITE-BREASTED NUTHATCH (Sitta carolinensis carolinensis). Common.
- 95. Tufted Titmouse (Baeolophus bicolor). Common to abundant.
- 96. Carolina Chickadee (Penthestes carolinensis carolinensis).
 Common to abundant.
- 97. Blue-gray Gnatcatcher (Polioptila cærulea cærulea). Common.
- 98. Wood Thrush (Hylochichla mustelina).

Common. Nothing added more to the grandeur of early dawn and twilight than the rich, gurgling melody of this justly-celebrated songster.

99. Robin (Planesticus migratorius migratorius).

Common, and becoming steadily more abundant. 160. Bluebird (Sialia sialis sialis).

Common.

THE PRAIRIE CHICKEN IN EAST CENTRAL IOWA

BY FRED J. PIERCE
WINTHROP, BUCHANAN COUNTY, IOWA

Indirectly, the advance of civilization has made many alterations in the lives of America's birds, and, in infrequent cases, it has spelled their doom. The coming of the white man into theretofore undeveloped country made a great many changes to which a great many birds could not readily adapt themselves. He cut down the forests, drained the wet lands, turned vast stretches of virgin prairie land into fields of food for himself, and built cities in what was formerly the great domain of nature's children. Some of the birds retreated farther into the wild as man advanced; others less timid returned his friendship and came close to his dwellings to rear their young; and a few, of their own volition, accepted his structures as superior to their own and thenceforth called them their homes. Unfortunately, a few, by reason of the excellent food their bodies contained, were dealt severe and long continued persecution,—to such extent that they were nearly, if not completely, wiped off the face of the earth.

In this paper the writer wishes to present some of the scattered notes he has gathered on the (Iowa) Prairie Chicken of yesterday and today. This now protected Iowa game bird was for many years a very common species, but, because of the great amount of persecution it has undergone, it has at last been put on the shelf as a game bird, and is now accorded the protection it has so long deserved. The present Iowa legislation has been doing and will do a vast amount of good toward its increase. The first five-year ban (ending 1922) on shooting Prairie Chickens has been followed by a second five-year closed shooting period, and it is to be hoped that this term may be again extended.

In an early day, Iowa's vast prairies stretched away on every side. The long, waving prairie grass formed the Prairie Chickens' natural home, and here they made their nests and reared their little ones, quite unmolested by hand of man. Of course, prairie fires were an inevitable danger, but these did not seem to be frequent enough to seriously affect their growth and prosperity. If man had not interfered, their existence would yet An ideal climate, an abundance of food, natural be envied. enemies not overwhelming,—what more could be desired? the winter, too, they were able to cope with the weather. The long and very severe winters did not hold terrors for them, for when their summer home—the dense, heavy grass—became snow covered, they often burrowed under it and converted the matted growth into a snug retreat for the night. Some of these tunnels would reach a distance of ten feet. Thus housed and protected, what did the wise Prairie Chicken care if it was "blizzing" outside and the mercury did go down to forty The next morning he came out to feed on weed seeds and whatever else nature had provided for him. A sleet storm, though, must have presented some serious difficulties to this "snow bird."

I am greatly indebted to Mr. Julius Gates, one of my neighbors, who has given me a great deal of valuable information regarding the Prairie Chickens' past abundance and the methods by which they were destroyed. Mr. Gates immigrated to this country in 1869, during a period when Prairie Chickens were trapped and marketed in immense quantities, and has for a half century been associated with this bird in the farming regions near Winthrop.

Trapping Prairie Chickens in Iowa seemed to reach the zenith some time in the seventies. Every one in the country was apparently interested in trapping and marketing these noble birds. Nearly every farmer had an abundance of spare time during the winter months and was anxious to turn his

vacant hours into dollars, so without thought or care of the scarcity this practice would eventually bring in the Prairie Chickens' ranks, he constructed a number of traps and non-chalantly set about hastening their destruction. The sons were as enthusiastic over this easy method of securing money as their father. The trapping industry was current gossip everywhere. "Well, how many 'chickens' did you get today?" was the stock question.

The traps used were very simple in working principle, but a good deal of time was required to make a successful trap. A large box made of laths, wider at the bottom than at top, constituted the trap. The box was about two feet high, two or more feet wide, and as long as a lath. A balanced door or "gangplank," which dropped the victims into the trap, filled a square hole in the top; the door was made of a shingle. Across the center of the box or coop a board was nailed to make it stronger, and in this holes were bored to receive sharpened sticks. Ears of corn were placed on these for bait. The corn seldom failed to induce the birds to hop upon the trap (or run up on poles leaned against it for this purpose) and step on the door in their attempt to reach the corn. The door dropped them inside. It was weighted with a stick of wood on the outer end so that it always came back automatically to its original position, where it was ready for another cargo. The vertical laths which formed the sides extended above the top and were sharpened on the ends to prevent the birds from approaching the bait from any place except at the opening in front of the door. A rough enclosure (with one end open) made of tall willow poles or brush usually surrounded the In the fall buckwheat was frequently sown in these selected spots so that the place would have a strong attraction when trapping operations began. Some ambitious trap owners made traps with two doors and had their birds going in from two sides. The traps were usually tested with domestic chickens before they were taken out. If properly constructed, the trap would be full of chickens in a very short time; if not, it was not worth taking out.

A short time after the trap was set, a flock of Prairie Chickens would be seen flying toward it, and, upon sighting the corn bait, a few would venture in. These acted as decoys and soon a steady stream would be going in. Occasionally a bird would fathom the purpose of the trap and, catching himself, would

fly back; but usually the birds were totally ignorant of the trap's object.

The trapper was happy when he peered in and saw the trap filled with birds. Many of them had become frightened, and in trying to escape had run around inside the trap and so injured their necks and wings that they were bleeding profusely. Now came the exciting part, for the birds were hard to catch and hold. They had an unbelievable amount of strength in their wings and many would fly out of a man's clutch in spite of his best efforts to hold them.

After the birds were killed, the necks were broken and folded under the wing; in this position (they were not dressed) they were frozen and then compactly placed in barrels, ready for shipping. They brought twenty-five cents each on the market, and a limited amount was also taken by local hotels at this price. Mr. Gates says that one winter his brother and he got fifty birds. Some neighbor boys trapped twenty-four in one day, he says. The young and old birds looked so much alike that it was next to impossible to distinguish them by appearance. A common way to tell was to hold them up by the bill and bend the head up or down. If the bill was flexible, it was a young bird; if stiff, an adult.

After the nefarious practice of trapping had gone on for some years, laws were passed to prohibit it, but, I am told, quite a number were still set away from roads in unfrequented places; however, these eventually passed out of existence.

Only a fair conception of the great numbers of Prairie Chickens which were once found here is gained by the statements of old residents. Mr. Gates says in the early morning they would often come in great flocks to the trees along Buffalo Creek and indulge in characteristic music, which he terms "cackling." * He says the trees would be loaded down:—"hundreds and hundreds of them, and oh! how they would cackle!" Every tree in the preferred district would be full of the birds, and he has often been at a loss to understand how the trees withstood the great weight. After leaving the trees they went to the fields and breakfasted on weed seeds, corn and other grains if they were to be had. They used to come around the farm buildings in the early hours of morning; the farmer could often shoot them off his barn roofs with very little difficulty.

^{*} See Oölogist, April, 1921, page 40 (Vol. 38, No. 4).

Gunning had a great deal to do with their decrease. A bird so plentiful and so easily secured was sure to receive a great amount of attention from shooters. Farmers, town folks, all, young and old, were hunting them continually. A Buchanan County newspaper of December 22, 1863,* tells of the enormous amount of Prairie Chickens which were coming into Independence, the county seat. One man sold \$350 worth in a day, and sales of \$50 to \$100 were of frequent occurrence, while it was not unusual to see three and four wagonloads of Prairie Chickens, Quail and Pheasants (together) on the streets in one day. The shipping of Prairie Chickens had assumed great proportions and some of the stores were piled high, preparatory to shipping east. It does not state how these birds were killed, but I infer they were both trapped and hunted. Another issue of the newspaper states that the county's best shooter had bagged 157 in a day with 150 shots. Still another note tells of four hunters who left Independence at 3:00 p. m. one day, drove fifteen miles and returned the next evening with 337 Prairie Chickens. This was certainly a record for thirteen hours or less. Great Prairie Chicken hunts, attended by many people, were frequently staged. Boys often kicked out the snow burrows and killed the helpless birds when they came to where they were sitting in the snow. This the boys considered great sport.

Reports of farmers lead to the belief that the barbed-wire fence has been responsible for the death of countless Prairie Chickens. These birds fly very low in their short flights about the fields and, I am told, hundreds of times they were victims of the wires. Farmers say they have often seen the bodies of the impaled birds hanging on the fences. Probably many other low-flying birds meet death in a similar manner.

Investigation of statements also shows that intentional prairie fires had an *enormous* effect on their decline in abundance. It was a common practice with farmers to burn off the prairies in the spring to remove the dead top grass. Unfortunately, this was habitually done when the prairies were covered with nests of the Prairie Chicken, and untold numbers of nests and even young were mercilessly destroyed in this way. After the fires had passed over these tracts, eggs were gathered up by the bushel. The fresh eggs that had been cooked in the

^{*} Quoted in *History of Buchanan County, Iowa, and Its People*, by Harry C. and Katharyn J. Chappell, two vols., Chicago, 1914.

fire were eaten at once, while the others were sorted and the fresh ones used later for the table. It was small wonder that this species could not regain its slipping foothold on life when its nests and young were destroyed in this cruel and wholesale manner.

When the fields of timothy hay began to supplant the prairies, the Prairie Chicken accepted them as nesting places, but here too they met with misfortune, for the mowing machine destroyed all the nests and young to be found at that season. When the hay was raked up, too, it was not unusual to find the mangled body of a mother bird who would not forsake her treasures when the mower came along making its "cutting remarks."

My friend, Mr. Gates, tells of many interesting characteristics of the Prairie Chicken, which he has observed during his sojourn in this region. They were looked upon as reliable weather prophets by farmers in frequent instances. Also when they indulged in their spring fighting and mating antics, the farmer knew that he would soon be working in his fields. The important-feeling males would go to a knoll or rise in the ground (the highest spot to be found always) to fight and boom, early morning being the preferred time. When two cocks found themselves facing each other, they invariably sprang into the air and flew at each other at full speed; when they crashed together they were usually about three feet from the ground. The Prairie Chicken's "boom" is certainly a wonderful sound on a fine spring morning, and once heard it is never to be forgotten; the bird is seldom thought of without the deep resounding boom coming to mind.

My father tells of a Prairie Hen which nested in a slough beside a cornfield, the nest being just at the end of a corn row. When plowing the corn in this particular row, it was necessary for the team to pass over the nest, one horse on each side of it. The brave bird did not leave the nest until the horses were directly over her. They were of course frightened when she burst out between their legs, but the eggs hatched safely. Horses often stepped on the birds when they refused to desert their nests. I know of two boys who set some Prairie Chicken eggs under a domestic hen. They awaited the developments with considerable interest, but when the little ones became two days old they all disappeared — "nature had reclaimed her own."

The first quarter of the Twentieth Century will soon be finished. On every hand the Prairie Chicken is becoming in evidence and bids fair to again become the plentiful game bird it once was. We who love the Prairie Chicken as a resident of our beautiful Iowa farm lands, rather than for the amount of meat its body contains, dislike to think of the time when it will once more have to stand up before the firing squad. The automatic shotgun, the small edition of the deadly machine gun, is becoming all too popular among so-called "sportsmen." Its manufacture ought to be prohibited. Covies of from ten to fifty of the birds are common in many regions. Frequent mention of their increase is found in the local presses. Where formerly we found none, we now see them rather regularly, and if present indications are at all prophetic, we shall have large numbers of them with us in the future. Time alone will tell whether this species can wholly adapt itself to the greatly changed conditions it now finds in its old haunts.

November, 1921.