

is the first occurrence for this immediate section for which I have any evidence. Soon afterwards I had the unusual pleasure of seeing in the air over me at one time two Red-tailed Hawks, a Black Vulture, a Bald Eagle, and a Raven. I had been watching the Hawks when the Eagle appeared higher up. While I had my glasses on the Eagle, I heard a hoarse "cra-ak," and about two hundred yards over my head was the Raven. I watched the bird for five or ten minutes and was positive of the identification. The Raven was soaring most of the time in small circles and calling at frequent intervals. I had the opportunity to compare the size both with the Red-tailed Hawks, which were still near and were also soaring, and with some Crows which flew past. The diamond-shaped tail, in marked contrast with the rounded tails of the Crows, was very evident. The Raven rose higher and higher and finally disappeared in the direction of Goshen Pass. —JAMES J. MURRAY, *Lexington, Virginia.*

Bill Deformity in a Blue Jay.—Late one fall several years ago, while hunting in a strip of woods in the Columbia Heights district of Minneapolis, Minnesota, my attention was arrested by the peculiar actions of one member of a small flock of Blue Jays that was moving leisurely through this patch of woods. The bird in question was perched upon a horizontal limb of an oak and was evidently struggling to grasp with its bill some object of food which presumably it had carried to the limb to eat, but the nature of which I was unable to make out at the distance. X

Its efforts to seize the object, whatever it was, were so extraordinary that I shot the bird in order to learn if possible what unusual item of food it had managed to secure. When I reached the spot I looked about first for the expected object of interest, but failing to find any such thing I turned my attention to the dead bird itself and then discovered the rather remarkable deformity of the bill here reported, and which, I was immediately convinced, was alone sufficient to explain the unusual behavior of the bird.

The deformity consisted of a dorsally bent upper mandible, the bend occurring just behind the anterior margins of the nares, with the affected premaxillary portion forming an angle of forty-five degrees with the basal plane of the skull. The condition was such that when the bill was held closed a considerable part of the tongue remained exposed, and it seemed hardly possible that the bird could have picked up any food with such a beak.

In the cleaned skull, with the horny sheaths of the bill removed by maceration, the bend is seen to include also the anterior tips of the palatines. The transverse direction of the bend is oblique to the horizontal plane of the skull, so that the upwardly bent premaxillary presents further a distinct rotation to the right on its own long axis.

With regard to the possible cause of the deformity, neither the horny nor the bony parts of the bill presented any clear evidence of mechanical injury, such as a break or a shot wound, and the most plausible explana-

tion would seem to be that the part had become bent in this manner, perhaps through some accident, while the bird was in the early nestling stage and its bill soft and pliable. But again it may be possible that the condition arose as a developmental abnormality in some pre-hatching stage.

The bird was in good condition of flesh, and one can hardly help marveling just a little that it had been able to maintain an existence, not only so well but at all, with what would appear at least to be a rather severe handicap.—CHARLES E. JOHNSON, *Roosevelt Wild Life Forest Exper. Station, N. Y. State College of Forestry, Syracuse.*

Red-winged Blackbirds Wintering in Ohio.—About the Lily Pond in the Shaker Lakes Park in Cleveland, Ohio, there is a considerable growth of cat-tails, affording a popular haunt of Red-winged Blackbirds (*Agelaius phoeniceus phoeniceus*). The last flock of Blackbirds left the pond in the second week of November, 1928, but on the 18th, and on nearly every subsequent visit, I found two of the birds. These were evidently females, since both were heavily streaked above and below and had a light, buffy line over the eye. I saw the birds last on January 26, 1929. My next visit to the park, two weeks later, came after a succession of days with the temperature consistently below the average for the season with several heavy snow-falls, and this circumstance probably sent them out in search of food or a warmer climate.

It might be of interest to compare this notation with the records of Red-wings in the 'Bird-Lore' Christmas Census for 1927 and 1928 in the northern states east of the Mississippi. In 1927 a total of 10 stations of 131 reporting listed these birds, while in 1928 the number had increased to 17 out of 127 stations. In each year the season immediately preceding had been reported as unusually warm and moist throughout most of the region.—WILLIAM H. WATTERSON, *Cleveland, Ohio.*

Snow Buntings Taking Insect Food.—On February 17, 1929 at Auburn, Geauga County, Ohio, I observed a flock of about 85 Snow Buntings (*Plectrophenax nivalis nivalis*) feeding on a stretch of bare snow in a field. Inspection revealed that the surface of the snow was well dotted with snow fleas (*Collembola*), the day being warm and suited to the habits of this insect, and I am sure that the birds were finding them a welcome addition to their regular seed diet. There had been a snow-fall a few hours before of sufficient volume to cover any seeds which might have blown onto the surface of the snow, which was level and entirely free from plants here. It is interesting to note that the Buntings, when flushed, flew to the top branches of a tall chestnut tree nearby.

From the various sources which I have consulted I find that the food of the Snow Bunting is considered by many to be entirely vegetable, while of those which mention animal food, none includes this rather obvious type. It would seem that snow fleas should provide an abundant supply of insect food in the late weeks of this bird's visit to the eastern United States.—WILLIAM H. WATTERSON, *Cleveland, Ohio.*