

GENERAL NOTES

Conducted by M. H. Swenk

Summer Occurrences of the Harris's Sparrow in South Dakota.—

On June 23, 1929, I saw a Harris's Sparrow (*Zonotrichia querula*). My wife had heard and seen it on the preceding day. Other dates that I saw it were June 25, July 4, July 5, and a couple of times during August. I found only one, though on two different occasions I looked searchingly for a possible mate. He appeared normal, and would whistle on every occasion that I saw him.—ADRIAN LARSON, *Arlington, S. D.*

Four Eggs in the Nest of a Mourning Dove.—While many accounts of sets of three and four eggs of the Mourning Dove (*Zenaidura macroura carolinensis*) have appeared, it is thought that additional records are desirable.

On April 5, 1928, Mr. Leo A. Luttringer, Jr. found a Mourning Dove nest which held one egg. On the following morning he flushed the parent from this egg. On April 18 we visited the nest and were amazed to find the slight structure filled to capacity with four eggs. Inquiry into the situation has pretty well established the fact that but one pair of Mourning Doves is nesting in this particular woodland; furthermore the shape and size of the eggs seem to indicate that all have been laid by the same bird.

It may be that exposure of two of the eggs during chilly weather induced the female to lay an additional two. All the eggs were fairly fresh, judging from their translucency; but the anxiety of the parent bird indicated that she had been incubating for some time. I incline, at present, to the belief that the eggs laid about April 5 were infertile, or that the small embryos were killed by exposure, and that two additional eggs were subsequently deposited.—GEORGE MIKSCHE SUTTON, *Bethany, W. Va.*

The Northern Pileated Woodpecker in Westmoreland County, Pennsylvania.—On the evening of June 22, 1929, Oscar C. Reiter and the writer heard, in fairly thin chestnut woods above McGinnis Run in Westmoreland County, Pennsylvania, a hammering that indicated the Northern Pileated Woodpecker (*Phloeotomus pileatus abieticola*). A visit early the next morning confirmed this. The bird was heard many times, was seen on a tree trunk at short range, and was seen in noisy, cackling flight showing the characteristic white of the wings. A second bird was heard, but not seen. A week later, accompanied by Rheinhold L. Fricke and H. H. Elliott, we made a search for nesting operations. The bird was again seen and heard. Fresh workings on chestnut trees and stumps were found, also older workings indicating residence for several seasons. Many holes were examined but no actual nest was found; perhaps because this bird usually nests several weeks earlier.—SIDNEY K. EASTWOOD, *Pittsburgh, Pa.*

Unsolved Problems Concerning Upper South Carolina Birds.—In my efforts to trace more accurately the zone boundaries in the southern foothills, and list several species not before catalogued, several important problems have presented themselves. Why the abundance of Loggerhead Shrikes in the foothills in winter, and so few nests in summer? Why is the presumably northern Orchard Oriole so rare in the Upper Piedmont, though commonly nesting in the Lower? Have we here a southern race in the making? Are not the Meadowlarks reported to me as nesting in the Piedmont really members of the southern race pushing into the dividing territory between the two races, rather than strag-

glers from the winter migrants from the north? To what extent do the larger rivers bring down the northern zones into the zones below, and do the thermal belts along the valley sides carry the southern zones northward? Year-round observations might add additional races for the following: Barred Owl, Pileated Woodpecker, Nighthawk, Blue Jay, Red-winged Blackbird, Grackles (*Quiscalus*), and possibly others. By far the most of my observations were perforce near the mountains, and must show that influence strongly.—A. L. PICKENS, *Berkeley, Cal.*

Banditry Among Birds.—Observing Robins when feeding on the ground, you will sometimes see one or more English Sparrows hopping around near them, and when the Robin finds a worm they will walk up to him quietly and boldly, take it out of his mouth, with scarcely a protest from the Robin. A few days ago I saw a sparrow take a worm out of a Robin's mouth and fly off with it, and the Robin simply went on hunting for another one. Then again I saw another Robin pull out a worm and a sparrow standing by tried his best to take it from him. The Robin would not give it up, but flew into a distant tree with the sparrow after him, but the sparrow failed to secure the worm this time. A neighbor of mine saw a Robin robbed six times of six worms, one right after the other, by a small flock of sparrows which had gathered around him, while the Robin kept on hunting for more worms.—HENRY A. PERSHING, *South Bend, Ind.*

Prairie Birds Seek the Shade.—On a recent trip through North Dakota, the writer noticed an interesting habit of certain prairie-nesting birds. During the intense heat of the afternoon numerous Lark Buntings (*Calamospiza melanocorys*) were found perching on the barbed wire fences. The birds were, however, sitting close to the posts and on the side opposite to the sun. Thus they took the advantage of the shade offered by the posts and kept out of the burning rays of the sun. A very few Chestnut-collared Longspurs (*Calcarius ornatus*) and one Western Mourning Dove (*Zenaidura macroura marginella*) were also resting in the same position. It seemed a well formed habit with the Lark Buntings, as was evidenced by hundreds of examples.—WILLIAM YOUNGORTH, *Sioux City, Iowa.*

The Relation Between the Blue Jay and the Pin Oak.—Through watching the behavior of a tame Blue Jay (*Cyanocitta cristata cristata*) that first came to us with an injured wing on August 5, 1929, and that in good weather is free to come and go as it pleases, the discovery was made that it feeds on a small white grub enclosed in the acorns of the pin oak (*Quercus palustris*), and not on the acorns themselves. Taking the hint, we watched the other Blue Jays, and observed them also feeding on these grubs.

Henry D. Thoreau (*Succession of Forest Trees*, 1860) says, "I can confirm what Wm. Bartram wrote to Wilson, the ornithologist, 'The Jay is one of the most useful—these birds alone are capable in a few years time to replant all the cleared lands'". This was said in regard to the well known habit of the Blue Jays of burying acorns. And it also appears that, in addition to providing food for unborn generations of their kind in planting tree seeds and nuts, they help the trees by destroying the enemies of the acorns. Is it too much to think that this relation, approaching a true symbiosis, gradually began with the primitive ancestors of both forms of life, and has helped in the present biological success of both species? The oaks provide a great excess of acorns, many millions more during the life of the tree than the one acorn which will reproduce the