

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

parent tree, but insurance that only a small proportion will be used for food by the birds is secured by the comparatively bitter taste. As a consequence this food is used principally in midwinter when little other is available.—E. C. HOFFMAN, *Lakewood, Ohio*.

A Young Pied-billed Grebe on Land.—On June 24, 1929, while helping my father on his farm, a neighbor called me concerning a strange bird that he had noted. On examination it proved to be a young Pied-billed Grebe (*Podilymbus podiceps*). The bird was about five inches long and quite active. It was found in the neighbor's back yard where it was moving about. There was no sign of injury to the bird. The nearest water was fifteen or twenty rods away, and I never have known grebes to nest or even remain there. However, across the road about three-quarters of a mile away is a small pond where grebes nest every year. The young this year (1929) left about June 14.

Whether this young bird had come from there or not, we can only speculate until some explanation of its origin as well as its leaving the water to travel about on land can be obtained.—LAWRENCE H. WALKINSHAW, *Battle Creek, Mich.*

The Chestnut-sided and Other Warblers Nesting in Geauga County, Ohio.—I was much interested in Mr. Louis W. Campbell's notes on the nesting of the Chestnut-sided Warblers near Toledo, in the December, 1928, number of the WILSON BULLETIN. My record of a nest of this species follows:

Chestnut-sided Warbler (*Dendroica pensylvanica*).—On May 27, 1919, I was standing in a clearing in a large wood, overgrown with briars and bushes, watching a troop of warblers. A pair of Chestnut-sided Warblers seemed interested in the crotch of a small beech. A short watch was rewarded by seeing the female bring nesting material. The nesting site had evidently just been selected.

I returned on June 12 and found the female at home. The nest was in a clump of scrubby beech, two feet from the ground and near the base of a large beech. The female refused to leave the nest until I touched her with my finger. The nest contained three well-incubated warbler eggs and one egg of the Cowbird. It was made of grasses and beech leaf calyces, lined with fine grass.

Other nesting pairs have been seen during breeding season but no other nests have been found. I consider them an uncommon resident.

Blue-winged Warbler (*Vermivora pinus*).—Uncommon, but not scarce. They are found on the outskirts of woods, nesting on the ground.

Golden-winged Warbler (*Vermivora chrysoptera*).—Rare. Only one pair noted during the breeding season. The nest could not be found.

Yellow Warbler (*Dendroica aestiva aestiva*).—Our most abundant summering warbler. It prefers small valleys, nesting in thorn bushes.

Cerulean Warbler (*Dendroica cerulea*).—Rare. No breeding record.

Ovenbird (*Seiurus aurocapillus*).—The nest of this common warbler can always be found not far from where the male is singing. I found a beautiful nest on June 3, 1928. This nest was very compact and had a trail of leaves laid one foot from the opening of the nest. The female bird sits very close. I nearly stepped on the nest to flush her. It contained five well-incubated eggs.

Water-Thrush (*Seiurus noveboracensis*).—I feel certain that this species nests about Bass Lake. The Water-Thrushes there have a decidedly different song than the song of the Louisiana Water-Thrush. I have not noted this species anywhere else in the county. I intend to collect a few Bass Lake specimens next summer to verify my observations.