From that time on until October 10th, when the last record was made, these birds were quite scarce, one or two at a time being seen about every third day.

There is so much resemblance between the fall birds of the Bay-breasted and Black-poll Warblers and they are both so numerous that a comparison of migration dates is interesting.

Practically all of these birds seen by the writer up to September 6th were Bay-breasts. Then for about two weeks the two species were about equally well represented.

After September 20th the Bay-breasts were scarce, while the Black-polls were numerous. The last Bay-breast was seen October 10th; the last Blackpoll October 19th, though in some years the Blackpolls stay about ten days later than that.

It is therefore probable that the bulk of the Bay-breasts are gone before the main body of Black-polls appear.

JOHN P. YOUNG.

Youngstown, Ohio.

WAS THIS BIRD FIGHTING VERMIN?

Some time ago, when out for a stroll, I came across an Indigo Bunting going through maneuvers new to me.

I stopped and watched the bird closely. He was on a small mound, bare of vegetation, and perhaps thirty or forty feet from me. He would pick up a mouthful of dirt, stand erect, drop his mouthful on his body, loosen up his feathers and shake himself. This operation was rapidly repeated for a minute or so. He then flew away.

I examined the mound and found it to be an ant-hill. The material was rather fine and compact, and a few small ants were racing across it.

The thought struck me that perhaps the bird was troubled with vermin, as birds often are, and that he was trying to put ants in among his feathers to devour them. I never had heard of anything of the kind, though I had seen birds and fowls wallow in the dust to eradicate vermin, as I supposed.

My curiosity was aroused. I wrote to the Pennsylvania State Zoölogist about it, but gave no intimation as to what I had mistrusted. In a few days a reply came saying he had no solution of the problem; that he had sent my letter to some authority in Philadelphia or Washington, and that the answer gave no light.

Lately, in perusing a copy of Mumford's "Birds and Nature," I saw an article on "The Wild Turkey," by John James Audubon. The article is not dated, but it is doubtless from the pen of the great ornithologist, who died in 1851.

In speaking of young turkeys, he says: "They roll themselves in deserted ants' nests to clear their growing feathers of loose scales, and to prevent ticks and other vermin from attacking them, these insects being unable to bear the odor of earth in which ants have been."

Here seems to be ground for my theory, only that the purpose of the Indigo Bunting was to put earth, not ants, among its feathers to rid itself of vermin. I remember that the bird, in filling its beak, seemed not to be particular as to where it struck the ground, only so that it got a mouthful.

Others may have seen birds do the same thing. If so, I have failed to see any record of it.

L. B. CUSHMAN.

North East, Pa.

NORTHERN PILEATED WOODPECKER IN ASHTABULA COUNTY, OHIO.

This year I spent a few days in October in Wayne Township, Ashtabula County, Ohio. On the morning of the twenty-seventh I heard a great commotion among the birds—Robins, Grackles, Red-wings, Bluebirds, Cowbirds, and Sparrows—at one side of a clearing in the woods, and made my way there to see what caused the uproar. An Owl, I thought most likely. But lo! at the edge of the woods, flying from tree to tree and only a few feet above the ground, a pair of Northern Pileated Woodpeckers. But the dead leaves' rustle betrayed me. The birds went deeper and deeper into the woods and higher into the trees, till at last I abandoned pursuit. I have spent many hours in the woods of this locality in the past ten years, but have never before seen nor heard these Woodpeckers, though they have been reported from Jefferson a few miles away.

It was while listening to the calls of the Woodpeckers, as I leaned over the fence by the "sugar-house," that I became aware of a fine female Grouse in a small apple tree near by. It seemed such a friendly bird, though the fence crashed down as I went over, not twenty feet away. A faint, rather hen-like clucking of protest and I stood right under her perch. It was the buds of the tree she sought, clambering through the smaller branches, and I left her undisturbed.

In September a Sandhill Crane was seen in the pasture by the creek.

HARRY J. GINTHER.

Cleveland, Ohio.