

ALEXANDER WILSON IN BIRD CENSUS WORK.

BY FRANK L. BURNS.

The many-sided Alexander Wilson has published, in the preface of Vol. IV, pp. V-X of his *American Ornithology*, dated September 12, 1811, probably the earliest bird census of this country. As it is found in only the earlier editions and consequently is inaccessible to most of my readers, I quote in full:

"To the philosopher, as well as the naturalist, and to every man of feeling, the names, migration, and immense multitudes of birds in this country, are subjects of interesting and instructive curiosity. From the twenty-first day of March to the first of May, it might with truth be asserted, that at least one hundred million of birds enter Pennsylvania from the south; part on their way farther north, and part to reside during the season. This is no extravagant computation, since it is allowing only about four hundred individuals to each square mile; though even those resident for the summer would probably average many more. Our forests at that season are everywhere stored with them; and even the most gloomy swamps and morasses swarm with their respective feathered tenants. In Mr. Bartram's Botanic garden, and the adjoining buildings, comprehending an extent of little more than eight acres, the Author has ascertained, during his present summer residence there, that not less than fifty-one pairs of birds took up their abode, and built their nests within that space. Almost all of these arrived between the above periods, besides multitudes of passengers. Every morning (for evening, night and morning seem their favorite hours of passage) some new strangers were heard or seen flitting through the arbors, until one general concert seemed to prevail from every part of the garden."

Wilson's figures are apparently based upon the assumption that the vernal migration progresses as a rule directly northward. The 250,000 square miles of territory required in his computation would extend from the southern limits of Penn-

sylvania to about the northern timber line. On the whole his estimate of 400 birds to the square mile would doubtlessly prove conservative for even present times. In his detailed list following, we have something tangible, and it has occurred to me that by the platting of a familiar tract of equal extent a comparison of the present and past in actual numbers of species and individuals might be not altogether impossible. My tract consists of one and one-half acres of fruit and shade trees, together with several buildings comprising my house; three and one-half acres of hedge, bush-and-brier-tangle bordered pasture; almost three acres of open thicket connecting the rear; and a small plat of a few square rods containing a few evergreens, joining the west front—about eight acres in all. True this tract lacks many of the essential features of the historic garden—the abundance of dense foliage, the buildings suitable for swallow and Phoebe, the damp meadow fed by the Schuylkill, and the proximity to the great Delaware—yet it is perhaps almost equally free from molestation, within the same faunal zone, and at no great distance (about 15 miles) from the scene of Wilson's labors.

The Swamp Sparrow has not been found as a breeder in this neighborhood, the Yellow Warbler is altogether uncommon, and while the Baltimore and Orchard Orioles, the Martin, and the Warbling Vireo have more or less frequently nested within this tract, they have only been present as callers the past season. Then the three acres of thicket has been turned into a section of a private park of late years, and in consequence it has lost not a little of its attractiveness to brush-loving birds.

A comparison of the number of individuals representing the species found in either place shows that six have practically held their own, one increasing materially, and while four species have decreased in number this would seem to be compensated for to a great extent by the increase of additional species, all of which are of undoubted benefit to mankind, excepting the Waxwing and European House Sparrow. On the whole, with the single exception of the Purple Martin, we

apprehend small grounds for fear of local extinction of any species named below, at least for some time to come:

Wilson, 1811. At Gray's Ferry only	No.	Present at both Gray's Ferry and Berwyn.	No.	Burns, 1907. At Berwyn only.
.....	.....	.....	2	Yellow-billed Cuckoo.
.....	.....	.....	2	Northern Flicker.
.....	4	Chimney Swift.....	4	Crested Flycatcher.
.....	.....	.....	2	Sometimes present.
Phoebe.....	2	.....	2	.....
.....	2	Wood Pewee.....	2	.....
Orchard Oriole.....	6	.....	.....	American Crow.
Baltimore Oriole.....	6	.....	2	Americaa Goldfinch.
.....	8	Purple Grackle.....	5	.....
.....	.....	.....	2	.....
.....	16	Chipping Sparrow.....	4	.....
Swamp Sparrow.....	2	.....	.....	Towhee.
.....	2	Indigo Bunting.....	2	.....
.....	.....	.....	2	Sometimes present.
.....	?	Scarlet Tanager.....	2	.....
Purple Martin.....	2	.....	2	Cedar Waxwing.
Barn Swallow.....	20	.....	4	Red-eyed Vireo.
.....	.....	.....	.....	Sometimes present.
.....	.....	.....	2	.....
Warbling Vireo.....	4	.....	4	Oven-bird.
.....	2	White-eyed Vireo.....	?	Kentucky Warbler.
Yellow Warbler.....	6	.....	.....	.....
.....	.....	.....	4	Brown Thrasher.
.....	2	Yellow-breasted Chat.....	2	Wood Thrush.
.....	10	Catbird.....	10	.....
.....	.....	.....	2	.....
.....	10	House Wren.....	2	.....
.....	.....	.....	4	.....
.....	2	American Robin.....	12	English Sparrow.
.....	.....	.....	10	.....
19 species.....	114	Individuals.....	95	25 species.

ASPECTS OF THE SPRING MIGRATION OF 1907.

BY LYND S JONES.

The spring migrations of the past season have so far receded that it is possible to view them in proper perspective. The migration phenomena were so surprising in many of their aspects that one became almost bewildered in his effort to properly follow the changes and exceptional features.

If anyone ever inclined to a doubt of the profound effect which weather has upon the movements of the birds such doubt must have been effectually dispelled long before the close of the last vernal migration season. Here in northern Ohio there was nothing unusual in either weather conditions