low. We have not been sufficiently methodical in counting individuals but hope to perfect this phase of the census.

The following have made one or more censuses with the writer: Allen Frost, George W. Gray, Charles W. Moulton, Robert Cushman Murphy, Leonard R. Donne, Ray Guernsey, Laidlaw Williams, Jackson Ketcham, Walter Granger, Edmund Platt, and Ludlow Griscom.

In the following table the validity of the semi-domesticated Mute Swans may well be questioned. They are included pending a decision as to their status. Both subspecies of the grackle are given as if they were separate species and Brewster's and Lawrence's Warblers are included as being of interest. Strictly speaking, neither of these last two should be counted when both the Blue-winged and the Goldenwinged Warblers occur on a list. There are at least eleven other possible species not yet listed, either local breeders or else transients which have at one time or another been recorded between May 11 and 30, but not on a census day: Least Bittern, Coot, Pectoral Sandpiper, Hungarian Partridge, Long-eared Owl, Great Horned Owl, Prairie Horned Lark, Fish Crow, Philadelphia Vireo, Kentucky Warbler and Hermit Thrush.

Rhinebeck, New York.

## STATISTICS ON THE HOUSE WREN

BY O. M. BRYENS

Much is being said nowadays about the misdemeanors of the House Wren, and I wish to state that I am in favor of the House Wren.

The houses which are being put up for these wrens have an entrance hole one inch in diameter. This is to protect the wren from the English Sparrow. In the cities and towns where there are many bird house boxes, I find that they are surrounded by hordes of English Sparrows. It is my opinion that were it not for the House Wrens there would be very few native birds nesting in bird houses where the English Sparrows are not driven away.

In 1915, while residing at McMillan, Michigan, I put up my first bird house, and kept adding until I had thirty-nine of them in 1924. The following table shows the number of bird families which nested on my premises year by year since 1915. It also shows that there was no decrease in the native birds which could be attributed to the presence of the House Wren.

The totals in the bottom line indicate the number of families, or nests, of all kinds for each year. And it will be seen that the number of families increased regularly, notwithstanding an increasing number of House Wrens.

|  | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sparrow Hawk ..---- |  |  |  |  |  |  |  | 1 |  |  |
| Northern Flicker.. |  |  |  |  | 1 | 1 | 1 |  |  |  |
| Purple Martin........ |  |  |  |  |  |  |  | 7 | 14 | 25 |
| Barn Swallow.-.....- |  |  |  | 1 | 1 | 1 | 2 | 1 | 2 | 3 |
| Tree Swallow..-...-.-- |  |  |  | 1 | 0 | 1 | 1 | 2 | 5 | 7 |
| Bluebird ..-..... |  | 1 | 1 | 2 | 3 | 5 | 4 | 2 | 2 | 3 |
| House Wren ........- | 1 | 3 | 3 | 4 | 3 | 2 | 3 | 4 | 7 | 0 |
| Species nesting....- | 1 | 2 | 2 | 4 | 4 | 5 | 5 | 6 | 5 | 4 |
| Total nestings ...... | 1 | 4 | 4 | 8 | 8 | 10 | 11 | 17 | 30 | 38 |

I may say that the flickers did not nest in the bird boxes, but made cavities in stumps or stubs near the home of the House Wrens, without molestation by the latter. The absence of the Tree Swallows in 1919 is accounted for by a clash between them and the Bluebirds. The Tree Swallows had possession when the Bluebirds came to inspect the quarters; a battle ensued in which the Bluebirds were victorious, and the swallows left the place. The table shows a decrease in the Barn Swallows breeding in 1922. This was due to English Sparrows, which had taken possession of one of the 1921 nests; however, the sparrows were caught and did not further disturb any of the birds.

The English Sparrow was also the cause of several years delay in getting the colony of Purple Martins established. The Purple Martin was the first species to take control of the house put up in 1915. The English Sparrows drove them out before I realized what was going on. The sparrows were shot, but the martins did not nest in the house until 1922. Each spring from 1916 to 1921 the martins would visit my place and spend three or four hours a day, then leave; except that the length of the martins' visits seemed to incrase slightly until they finally gained control.

Bluebirds were most numerous in 1920, but dropped off in succeeding years, as shown in the table. This setback was not due to the House Wren, for the wrens did not use any house that was claimed by the Bluebirds; and in fact, Bluebirds were not as much in evidence in those years.

We had the House Wrens in 1915, the first year that boxes were put up. They arrived that year about a week or ten days after the Purple Martins had been forced out. Thereafter they made a rather steady increase until last year, 1924, when none at all occupied the wren boxes. The explanation of this complete absence is still lacking. Nowhere that year, so far as I know, were other bird houses put up which could have drawn our wrens to another locality. I would say, however, that these wrens were found in smaller numbers that year even in the brush and woodlands in our vicinity.

Surely the House Wren did no harm to the Bluebirds during the ten years of my experience. For did not the wrens decrease and the Bluebirds increase during the two years following 1918? If the House Wrens were harming the other species of birds why did the latter show such a steady increase in the number of pairs nesting on my premises? Because there was such an increase I believe that the wrens were not doing the harm with which they are charged.

All of my bird houses have been erected on poles from ten to twenty-six feet high. All but three of these poles have been fastened to fence posts. The houses which are in the open field average about 100 feet apart, and are all single-room houses; while those houses which are near the buildings and yard are as close as ten feet. When adding more houses I generally favored the species that increased the year before. Perhaps this may be the reason why the House Wrens gave me no trouble; there were always plenty of houses, and there existed no necessity for driving away other species.

Earlier in this paper I have discussed the decrease in the Bluebirds after 1920, and have expresseed the opinion that the House Wrens had nothing to do with it. Passing now from this negative consideration I may introduce a possible factor from the positive angle. In 1920 there were five pairs of Bluebirds nesting on the premises, but among the five pairs there were only four males. One of the males looked after, and fed, two females. These two females had their nests about 200 feet apart. After a severe rain and wind storm I noticed the absence of activity about one of these two nests. Upon examination I found the young dead in the nest. It seemed evident that the rain had beaten in upon the young and had caused their death. The loss of this brood of young may have had something to do with the decrease in the following years.

On the other hand, in the three families of House Wrens in 1921 there was only one male. Here also a rain storm caused the loss of the second brood of one of these families. Nevertheless, in 1922 we had four families of wrens with four males. These facts may not have any direct bearing upon the problem being considered, but perhaps they should be included in a full statement.

I have endeavored to explain the fluctuations in the number of pairs breeding from year to year, and I can not find that the wrens were guilty of causing the loss of any birds which otherwise would have nested on my place.

Three Rivers, Michigan.

