NOTES ON A PURPLE MARTIN COLONY.

BY G. FRED ZIEGLER, JR.

TOURISTS passing through the little town of Greencastle, Pennsylvania, which lies in the center of the Cumberland Valley, frequently stop their cars on the public square and get out to observe more carefully the curious dark blue-black birds which dart recklessly hither and thither above the heads of the townspeople or perch confidently on the porches of the numerous boxes which have been put up around the square for their convenience. "What are these birds?," they ask of the nearest passer-by; and the passer-by, whether he be old or young, at once replies with evident pride: "Why, those are the Purple Martins!" And, if he is a true Greencastle citizen, he needs but little encouragement to launch forth into an account of the history and habits of these handsome Swallows which for years have made the town their home and in doing so have conferred upon it a unique distinction.

It is not that Greencastle is the only town where Purple Martin colonies can be found; even Greencastle people will admit that. But when it comes to the matter of tameness—of friendly intimacy between the birds and the citizens—then it is that the inhabitants of the town swell with pride and are willing to back their town against any other in the country. And the astonished tourist can hardly blame them. He has read, perhaps, a little about the Martins. He has learned that, in common with certain other Swallows, they used to make their homes in hollow trees and that they gradually came to accept the hospitality of man to the extent of living in gourds or other artificial hollows provided for them. But he has always regarded them as being shy; the bird-box catalogues, for instance, have had pictures in them showing elaborate boxes set on poles fifteen or twenty feet from the ground, and generally located on an expansive lawn, with "Keep-off-the-Grass" signs probably somewhere near. What wonder, then, that what he sees surprises him! Instead of a diminutive palace, with turrets and porticos of one sort or another, all he sees is a plain rectangular box, with six compartments one above the other,

each with a platform in front to serve as a perch. Instead of being fifteen or twenty feet above the ground, these boxes are hardly eight feet above the ground at their base; and, instead of standing in a protected place—a public park or traffic isle—they are nailed to the telegraph poles around the square, in the very heart of the town's business section, and within easy reach of the people passing by on the pavements. The strange part is that the birds not only show no timidity, but actually seem to revel in the commotion; they not only dart at the brooms of the merchants when the latter are sweeping their pavements in the morning, but they positively refuse to live anywhere except on the main streets, and all efforts to attract them to remoter and quieter portions of the town have so far proved unavailing. Quite naturally, the tamer the Martins become, the prouder become the people of the town; until now it is safe to say that for any man to injure one of those birds deliberately would make him a criminal in the eyes of the community.

Inquiry as to the length of time during which the Martins have made their home in Greencastle brings to light a rather interesting bit of history. The older residents of the town confess that, although in their day people did not pay as much attention to birds of any kind as they do now, nevertheless as children they were interested in the Martins; and the birds were apparently common in the town as far back as 1840 and undoubtedly even in advance of that date. At the time of the Civil War an old two-story tavern, famous for having been visited once by General George Washington and for having been the lodging place of the surveyors Mason and Dixon, used to stand on the southwest corner of the public square, and it was there, according to these older residents, that they remember seeing the first Martin boxes, the boxes having been attached to the building just below the second-story windows. Later there was a box put on the southeast corner of the square, just opposite the hotel, but this box apparently was placed too high, failed to attract any feathered tenants, and was finally taken down after standing unoccupied for almost a decade. The birds were very common, however, throughout the entire period of the War and for ten to fifteen years thereafter.

Then a curious thing happened. One spring the Martins failed to reappear or at least failed to take possession of their summer

quarters. They did not come back the next year or the next. For ten or fifteen years nobody saw them, and a whole generation grew up in ignorance of them. The mystery has never been satisfactorily explained, but the writer of this article quite unexpectedly came across a clue which furnishes a possible solution. About a year ago he was talking with Dr. F. A. Bushey, a native and lifelong resident of the town and veteran of the Civil War, and the doctor was telling of some of his war experiences. The conversation had turned on an English captain with whom the doctor had become associated during the war, and, in the course of the reminiscences that followed, the doctor casually told the following incident:

He was walking one spring morning with his friend the captain through the capitol grounds in Washington City, when the latter suddenly touched him on the arm and called his attention to a small brownish bird, with a black throat-patch, which had flown into a bush in front of them. "That bird," the captain exclaimed, "is an English Sparrow! I never saw one in this country before," The doctor looked at the bird with some interest and then in a few minutes forgot all about it. "But, do you know," continued the doctor, "when I came home to Greencastle that fall to vote—I was practicing in Washington in 1878—the first thing I saw when I stepped off the railroad train was a little flock of those same birds on the station platform; and I remember I told some of the townspeople what they were, and they were mad because they said these birds were *driving away their Purple Martins.*"

Driving away their Purple Martins! Here was a real suggestion. The writer immediately acted upon it and interviewed some of the other elderly people of the town. Well, since they came to think of it, they did remember something about such a thing; they had not thought about it for many years, but there was a time when they had heard people talking about some new bird driving out the Martins. A comparison of dates confirmed the theory Most of the people interviewed had agreed that from about 1880 to 1890 or 1895 there were no Martins in the town, and it was just during that period that the English Sparrows were most rapidly multiplying.

Whatever the cause, the damage had been done, apparently once and for all. The Martins had gone and were not coming back. The people of the town tried various means of coaxing them to return, but without success. After a while most people ceased trying. Two men, however, never gave up the fight. George F. Bloser conducted—and still conducts—a jewelry store on the southwest corner of the square, the corner which in war times had been the headquarters of the Martin colony. In front of his store, erected upon a pole, stood the large wooden watch that was the trade-mark of the profession. One April morning Mr. Bloser was standing in front of his store when a solitary Purple Martin alighted on the top of the wooden watch-stem. Mr. Bloser took one look at the bird and then made a rush for his cellar, coming up in a few minutes with a rudely-constructed bird-box which he then proceeded to fasten to the clock. Ten minutes later his efforts were rewarded when the lone bird—which had a peculiar white marking on its left wing—inspected the box and found it to its liking. The bird disappeared for a day or so, according to the testimony of Mr. Bloser and others, and then came back again accompanied by the flock.

James Shirey, proprietor of a hotel—The Franklin House—which stood on one of the main streets, only a few yards from the square, was another devoted admirer of the Purple Martin; liked to watch it, he said, and liked to hear it sing. Spring after spring he continued to put out boxes, and about 1900, when he remodeled the hotel and made a three-story building of it, he put up boxes on the chimney, at the very top of the building, in the vain hope that he could get back his birds. A year or so later he had a happier idea. He was building a portico over the front entrance of the hotel, a structure just one-story high, the top of which served as a balcony for dwellers on the second floor of the building. Into the wall of this balcony, facing the street and only a few feet above the pavement, he built a Martin box of six compartments, placed horizontally. This time he did not have long to wait for tenants. The Martins must have finally found a house that suited them or have mustered up courage enough to face the Sparrows, and the year following Mr. Bloser's experience saw a second colony established in Greencastle. The business of box-building immedi-

ately revived. H. W. McLaughlin, proprietor of a another hotel on another street, followed Mr. Shirey's lead and succeeded in establishing a colony in front of his hotel. Merchants on the public square erected boxes. Property holders everywhere joined in the effort. From that day to this the town has had its Martins, and almost every year sees new boxes going up. Two years ago the local nature club put up on the square the boxes which are likely first to attract the tourist's attention and which, together with the historic boxes at the two hotels, house practically all of the town's Martin population. Desultory fighting still takes place every spring between the Martins and the English Sparrows, but with their own pluck and the moral support of Greencastle's citizens the Martins seem to have no trouble in evicting any Sparrow that may have squatted in their boxes over the winter.

As migrants the Martins arouse considerable interest. Each year, about the middle of March, a single bird arrives, who seems to act as a scout for all the others—at least the townspeople firmly believe that he does. Beyond a doubt he vanishes again, and in a few days, varying from two to seven or eight, the advance guard of the flock appears. Gradually other stragglers come in. By the second week of April most of the boxes are occupied and the streets resound, of a morning, with cheery whistles, something between a warble and a chuckle. In the latter part of May the eggs are laid, and toward the end of June the half-fledged young birds present themselves to public view and in the following months they learn to fly, amid hair-raising adventures with hungry cats and bad-tempered Sparrows. Early in August the flock shows signs of restlessness, gathering each morning and evening in large numbers on the telephone wires. Some morning the town wakes up to find them gone. They are the first of all the migrants to leave, setting-out by night and generally going all at the same time; although in the fall of 1921, for some unknown reason, a

* Mr. Bloser and William R. Davison, Esq., have assured the writer that for three consecutive years following the coming of the white-marked Martin to the Bloser box they observed the return of the same bird each spring, and that in every instance he arrived alone, to disappear subsequently and return with others of the colony.

single pair* remained in the town until about the twentieth of November, nearly ten weeks after the rest of the flock had gone. No trace was seen of them after that date and it is feared they froze to death.

The following table, taken from the records of the Greencastle Nature Club and its successor The Franklin County (Pa.) Nature Club shows the arrival and a few of the departure dates of the Purple Martin at Greencastle over the period of seven and a half years from 1915 to 1922:

Year	Date When First Bird Was Seen	Departure Date
1915	April 7	Sept. 11
1916	March 31	Sept. 7
1917	March 21	August (?)
1918	March 30	August 20
1919	March 17	August 6
1920	March 26	
1921	March 8	August 10
1922	March 21	

Greencastle, Franklin Co., Pa.

BIRD BANDING AS AN AID TO THE STUDY OF MIGRATION.

BY HARRY C. OBERHOLSER.

MUCH importance attaches to an accurate and thorough knowledge of bird migration. The solution of the many interesting scientific problems presented by this mystery of the bird world is of practical value in such matters as the protection and increase of migratory birds. These problems have long attracted attention, and many ornithologists, among them Palmén in Finland, von Middendorff, Severzoff, and Menzbier in the Russian Empire, Homeyer in Germany, Winge in Denmark, Gätke in Helgoland, Herman in Hungary, Rössler in Croatia, Clarke and Whitlock in Great Britain, and Baird, Cooke, and Brewster in North America, have contributed much to our knowledge of bird migration. The

* This circumstance is the more peculiar because both birds were adults and entirely able to fly.