

## BIRDS AND AUTOMOBILES

By ALEXANDER WETMORE

THE killing of birds by automobiles as observed by naturalist travelers on our highways has been the subject of record in various notes in current periodicals. As most of the observations have dealt with the numbers and kinds of birds and other creatures destroyed, it is not necessary to review this phase of the subject in the present brief consideration of some of the factors involved in this steadily increasing mortality, except to observe that, since modern highways traverse land habitats of every kind, it follows that all kinds of birds, except possibly those of strictly aquatic habit, are to some extent liable to destruction by speeding autos. The writer has been much interested in the general subject and has given it considerable attention in recent years during extended travel by auto.

In the region about Washington, D. C., the greatest mortality from this cause among our avian friends occurs from June to September, owing unquestionably to the presence during that period of young birds, these being struck down more readily than adults, through the fact that they are less wary and less expert on the wing than older individuals. A smaller number of adult birds are destroyed during April and May when the preoccupations of the mating-season render birds less cautious of danger, so that in the dashing pursuits that form a regular part of the courtship of most small species they may cross roadways and so be struck by passing cars. Comparatively few individuals are killed during winter.

It is evident that a common way for birds to be killed is for them to fly across a roadway at a low elevation without proper judgment of the speed of an approaching auto. In this manner such species as Cuckoos, Quails, Wood Thrushes, and Wrens, to mention only a few, may meet their doom. Others are struck down as they rise from resting on the smooth roadway, these including English Sparrows, Red-headed Woodpeckers, and other species of similar habit. At first thought one wonders why these birds come so regularly to apparently bare and unattractive strips of cement or asphaltum, but on close observation it is noted that on these pavements there are found the bodies of dead or crippled insects struck down by passing cars, that offer an attractive store of food easily evident to the sharp eyes of birds, which congregate in numbers at all such food sources. Insects, though killed in numbers by day, seem to be destroyed especially during warm nights in summer, so that at

sunrise in the morning their bodies are found in abundance in the roads. Traffic along the highways at this early hour is slack, and birds come out in numbers to feed. Many of the cars on the road at this period travel at high speed, so that our feathered friends, perhaps a little sluggish after a night of rest, are subject to greater danger than at any other time of day. High-powered cars traveling rapidly at this time of day often leave a trail of dead sparrows and other birds to mark their passage. The roadway under these conditions is a baited trap of extreme danger. On cool mornings, birds delight in resting in the warm rays of the morning sun, and Sparrows and Swallows especially find the heat reflected from the hard surface of our highways attractive, particularly on sloping stretches sheltered from winds. Basking here with relaxed attention, they are especially exposed to the rapidly traveling auto, which is upon them as a destroying monster before there is appreciation of danger.

Mortality is greatest among flocking birds, as some individuals become confused and in attempting to escape the wheels overlook the higher body of the car, or in swerving to avoid their fellows are thrown against the auto. Some seem to have full appreciation of their danger and rise at a distance. Though young birds may be heedless, their parents at times realize the peril of an approaching auto. The writer while driving along a city street has observed a male English Sparrow utter the same chattering alarm call that it would use for a cat or marauding jay at the sight of one of its young in the path of the auto.

The increased speed at which cars have traveled in the past three or four years due to the development of faster models has brought a readily appreciable increase in bird mortality. At thirty miles an hour most small birds, unless caught unawares, can escape an approaching car. At forty miles or more an hour this becomes increasingly difficult, as with birds rising from the roadway the speeding car is upon them before they can gain momentum and they are struck directly or are drawn in by the rush of air so that they hit the auto. Relatively few birds are run over directly by the tires. The majority hit the radiator or fenders or are drawn underneath to strike somewhere there. They then fall to the road, to be run over and flattened out by vehicles that follow. A few are only stunned and may revive and escape, though it must frequently happen that a second auto passes over them before this is possible. The writer has picked up a Song Sparrow lying apparently dead on the road, to have it revive in a short time and fully recover so that it was released—after being duly banded—apparently

none the worse for its adventure, though much subdued at its awakening amid unfamiliar surroundings at a point distant from that where it had been injured.

Mention has been made of destruction of birds in early morning. The majority of dead birds will be seen at this time of day since the bodies of the dead rapidly disappear. As car after car passes over them the small bodies are flattened thinner and thinner, they dry, and finally are whisked away to disappear in the roadside vegetation. Buzzards and crows, too, have learned that our surfaced highways are a potential source of food and regularly patrol them to pick up the bodies of dead birds for food. Occasionally a buzzard is killed in turn, but the writer has yet to see a crow thus destroyed. From these causes the bodies of birds killed by autos usually rapidly disappear, so that records of dead birds seen give only a part of the truth concerning the extent of such loss. It is common observation to see a dozen English and Song Sparrows dead along a stretch of highway in early morning soon after sunrise, and to find on return along the same route in afternoon that all but one or two have entirely disappeared. The disparity in result of observations at these two periods is easily evident. Another factor that must be reckoned by those interested in these matters is that the telephone, telegraph, and power lines that follow our roadways also take toll of birds particularly where they cross marshes or other flyways, so that not every dead bird found in the path of our autos has necessarily been killed by a car.

For all this destruction there is no apparent remedy, and the auto must be reckoned as another of the factors introduced by our civilization that is inimical to birds. A little care in driving on the part of those interested will assist a small amount in allowing a few individual birds to escape. The writer in many thousands of miles of auto driving—not always in conformity with designated speed-limits—can recall having struck only three birds, one a juvenile Song Sparrow that flew against the radiator and was killed when the car was coasting down a hill at not more than thirty miles an hour, one a young English Sparrow that was hit beside the road in swerving to avoid an obstacle, and the third another English Sparrow so engrossed in spiteful pursuit of one of its fellows that it flew directly against a headlight with the car moving at only twenty miles an hour. It must be recorded, however, that the majority of drivers are heedless or do not see the birds in their paths, so that from these sources there comes great destruction.