(p. 407), under *Larus ridibundus ridibundus*: "The dancing movements on the mud to bring up the mudworms (commented on almost annually as something new) was known to Hele over sixty years ago."—CLAUD B. TICEHURST, *Saxon House, Appledore, Kent, England, August 30, 1933.*

Traffic Mortality of Wild Life.—All of us, I think, are interested in the toll that modern traffic conditions exact of wild life. Statistics, however, are difficult to amass. Not only is it usually inconvenient to stop, alight, and examine each victim on an extended motor trip, but it is often impossible to decide how recent was its demise. The durability varies with the climatic conditions, amount of traffic, and position upon the right of way. I have known a defunct Barn Owl upon the extreme inside margin of a curve to remain recognizable for weeks, while several trucks may reduce a ground squirrel to an unrecognizable smear in as many hours.

It was my fortune during the past summer to cover by motor more than 10,000 miles in the course of three months. The plan followed was to go west by the Santa Fe Trail, cover considerable ground in California, and return east by the Lincoln Highway. No attempt was made to take a census of vertebrate remains upon the roads, nor to alight and identify every doubtful carcass. I anticipated, however, with no little interest such an opportunity to observe and digest conditions over the entire width of the country that should prove most destructive to wild life, namely, consistently high touring speeds in excess of fifty-five miles per hour.

I was agreeably surprised to find that the destruction encountered was much less than anticipated, particularly westward. The greatest mortality by far was among rabbits (chiefly *Lepus*), and next in point of conspicuousness, although probably not in actual numbers, was skunks. Both of these mammals meet disaster only during the hours of darkness. On the whole very few dead birds were seen, the remains recognizable from the car as avian averaging less than one in 15 or 20 miles, I should say. There were long stretches of country, particularly in the more arid sections, where no dead birds at all were seen. Or in contrast there was an area where three Barn Owls (*Tyto alba*) were noted in less than a dozen miles, and the motor car must here have proved to be one of the most serious hazards encountered by this species.

The birds were a mixed lot, with only one species definitely preponderant, and that, surprisingly, was the English Sparrow (*Passer domesticus*). We look upon this alien as being most adaptable, but it was the only one killed by my car on the trip, and several dozen were accounted for. This mortality is doubtless only seasonal, and was confined to the middle west. Here, in early September, these sparrows had gathered into flocks and frequently were feeding upon the seeds of weeds on both sides of the road. At the approach of a car the birds upon one side would fly away and the members of the flock upon the opposite side of the road would attempt to join their companions. As a result my car frequently hit a number of birds of a single flock, and many times I saw where some other car had killed a dozen or more individuals at once.

I believe there are few motorists who have driven cars in excess of twenty years who will deny that the domestic fowl is now more adroit at escaping the hazards of traffic than formerly. In spite of the higher speeds attained and the excessive multiplication of cars, one sees probably fewer dead chickens upon the roads now than in 1913. That all the more incautious fowls and their progeny have been eliminated in the interim appears highly improbable, and yet that extreme vacillation preceding a wrong decision and fatal dash, so characteristic of the hen of the earlier part of the century, and so harassing to the contemporary motorist, is now but rarely encountered. I believe the average native bird to be fully the intellectual match of any domestic fowl, and that what the former has done the latter can do. I, for one, am of the opinion that our avifauna can meet, and is gradually meeting, the traffic problem.—A. BRAZIER HOWELL, *Department of Anatomy, Johns Hopkins Medical School, Baltimore, Maryland, September 22, 1933.*

Unusual Behavior of the Western Robin.—Several hours were spent by me at Mirror Lake, Yosemite, on September 15 and 16, 1933. I was there to study tracks and to learn who or what might be feeding on the stranded fish. On the second day

I saw the long isolated arm of the lake go dry, and I saw thousands of trout fry perish. Also I saw large fish, over a foot long, go into spasms and after ten or fifteen minutes of intermittently wild convulsions turn belly-up and slowly sink to the bottom of the pool. And while all this was going on, the Western Robins (*Turdus migratorius propinquus*) were having fat pickings.

Scattered along the margin of the brown pool, feeding on the mud flats like a company of sandpipers, were at times as many as nineteen robins. Occasionally a spotted robin would plunge in belly-deep to capture a fish. The old birds were content to stand on the shore and to pluck their fish when they came into shallow water. The fish taken by the robins were about two inches long. These fish they would toss out on the beach, mangle with their bill, beat on the ground, and otherwise soften before attempting to swallow. One robin was seen to capture and to consume four fish. All the robins were actively fishing, but I could not keep count on more than one at a time. All day long robins were coming and going, probably the same birds, perhaps twenty in all.—CHARLES W. MICHAEL, *Yosemite, California, September 17, 1933.*

Flicker Hybrids.—The immediate suggestion for this discussion of hybridization in the genus *Colaptes* arises out of a full family of hybrid flickers collected under the direction of Mr. H. F. Hughes at Shaunavon, Saskatchewan, June 15, 1933, and presented to the National Museum of Canada. The family consists of the two parents and four juvenal offspring just as they left the nest. Neither parent is of pure blood, though the male is strongly *Colaptes auratus* while the female is about equally as strongly *Colaptes cafer*. The following table gives the estimated strength in percentages of each distinctive specific character in each individual.

		Parents		Young			
	Character	♂	♀	♂	♀	♀	♀
auratus	Throat fawn color	50	50	20	40	50	60
	Malar stripe black	90	.....	100	....	....	....
	Nuchal bar present	100	0	100	70	75	10
	Wing and tail yellow	100	0	100	100	100	0
	Total percentage *auratus* characters	88	12½	84	77½	80	17½
cafer	Throat gray	50	50	80	60	50	40
	Malar stripe red	10	....	0	....	....	....
	Nuchal bar absent	0	100	0	30	25	90
	Wing and tail red	0	100	0	0	0	100
	Total percentage *cafer* characters	12	87½	16	22½	20	82½

In comparing these birds with a collection of 156 specimens of the two flickers and their hybrids in the collections of the National Museum of Canada there is comparatively little to add to the very complete study of the subject made by J. A. Allen (Bull. Am. Mus. Nat. Hist., 4, 1892, pp. 21-44), but the geographical extent of hybridization as it occurs in Canada can be indicated in greater detail than is shown on his map. The maximum of hybridization in Canada occurs along the international boundary from southwestern Saskatchewan north to Medicine Hat and up the eastern foothills of the Rocky Mountains at least to Jasper Park and the Yellowhead Pass of the Canadian National Railway. Throughout this range in a narrow line all the flickers seem more or less completely mongrelized and specimens of approximately pure blood of either species are the exception. East and north and in Manitoba, *auratus* rapidly predominates, though individuals showing more or less *cafer* influence occur occasionally at Winnipeg and casually as far east even as Toronto. Good series from Whitewater, Oak and Shoal lakes, Manitoba, Last Mountain Lake, Saskatchewan, and Lac la Nonne, northwest of Edmonton, Alberta, seem to be practically pure *auratus*.

In British Columbia the Red-shafted is the dominant flicker throughout the southern parts and on the coast up the Alaska panhandle. Northward and eastward it is gradually replaced by the Yellow-shafted. However, the latter occurs more or less regularly throughout British Columbia, and wherever it occurs it hybridizes freely with the other. In fact it is doubtful if any of the flickers of this province are strictly pure of either species. Many specimens that appear so undoubtedly have some specific mixture in their ancestry ready to break out in succeeding generations. The *auratus* influence is weaker on the coast than in the interior and still more attenuated on the coastal islands; but *auratus* has been reported from Vancouver