

THE AUTOMOBILE AND WILD LIFE

(ANIMALS KILLED ON A 25-MILE STRETCH OF ILLINOIS HIGHWAY FROM 1930 TO 1933)

BY

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The automobile has had a tremendous effect on many phases of our modern life. It has also had a very marked effect on the wild life in the districts which are traversed by main automobile highways. The following records give some interesting data on the effect of the automobile on the wild life of a prairie area in central Illinois.

The highway on which these records were taken can be considered typical of many of the paved state roads in central Illinois. The records were taken in a twenty-five mile stretch between Urbana, Illinois and Oakwood, Illinois, on state highway No. 10. The road passes through four towns of from 100 to approximately 800 population and also goes close by two other towns of about the same size. Most of the road runs over the level prairie country of central Illinois and passes through a fertile farming area. It crosses two small streams, the Salt Fork near St. Joseph and Stoney Creek near Oakwood. There are several pieces of woodland near the road but it does not actually pass through any forested land. The pavement is nearly all cement in good condition throughout. The Illinois Traction System and the Peoria Branch of the Big Four Railroad closely parallel the road for most of its distance.

TABLE I.—Dead Animals on a 25-Mile Stretch of Illinois Highway.

May 1, 1930 to December 31, 1930.

Number of observations.	4	4	4	4	2	1	0	1	20
Month.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
ANIMALS OR BIRDS.									
1. Blackbirds.....	1								1
2. Cats.....	2								10
3. Chickens.....	6	4	1	6	3	1		1	31
4. Flickers.....	2			1	2				5
5. Gophers.....	10	7	3	10	5	2			37
6. Meadow Larks.....	1	1	1						3
7. Mice.....		1							1
8. Muskrats.....		1							1
9. Owls.....						1			1
10. Rabbits.....	4	4	7	4	1			2	22
11. Rats.....		1		1	1				3
12. Redheaded Woodpeckers.....	2	1	2	2					7
13. Robins.....	1								1
14. Skunks.....	1				1				2
15. Snakes.....					4				5
16. Sparrows (English).....	9	23	45	59	6	2		2	146
17. Squirrels.....					1			1	2
18. Threshers.....		2	1	1					4
19. Toads.....			1						1
20. Turkeys.....	1								1
21. Turtles.....	1	2							3
Total.....	41	47	67	96	22	7		7	287
Animals unknown.....	1	1	4	4	2				12
Birds unknown.....	2	7	3	6					18
Total.....	44	55	74	106	24	7		7	317
Number of miles.....	100	100	100	100	50	25		25	500
Average number of animals per mile.....	.44	.55	.74	1.06	.48	.28		.28	.634

The speed of cars going along the road will average from 35 to 50 miles per hour. Traffic is moderately heavy. In the summer months one will meet from 80 to 100 cars in driving this stretch of 25 miles. In the winter there will be only about 40 to 80. From counts of cars made on many different days it is certain that from early morning until late in the evening an average of about two cars per minute will pass over a section of the surface of this highway.

The records were made for the most part on Sunday mornings between seven and nine o'clock. They were sometimes made in the afternoon and on other days. The data were taken while driving at 20 to 25 miles per hour with two people in the car, both keeping careful watch on the highway. If a dead animal or bird was seen which could not be readily identified, the car was slowed down or stopped. There was at least a five day interval, in most cases a seven day interval between the records. Previous experience in placing dead animals on this type of highway has shown that it is a very rare for the body of the animal to remain on the road more than three days. In most cases the animal does not remain more than a day. In a few cases the body of the animal may become stuck to the highway and remain in the same place for a week or more.

TABLE II—Dead Animals on a 25-Mile Stretch of Illinois Highway.

January 1, 1931 to December 31, 1931.

Number of observations.	2	1	0	3	5	3	4	2	4	1	1	3	29
Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
ANIMALS OR BIRDS.													
1. Blackbirds.....					2	1	3	1	1				8
2. Bluejays.....						1							1
3. Cats.....				2	5	1							14
4. Chickens.....	2			1	4		7	1	3	1		1	30
5. Dogs.....	1							3			2		2
6. Doves.....							1					1	1
7. Flickers.....				1		2							1
8. Gophers.....					15	7	3						6
9. Hawks.....	1			1			7	1	8	1			39
10. Juncos.....				1									2
11. Meadow Larks.....							1						1
12. Moles.....							1						1
13. Opossum.....								1					1
14. Owls (Screech).....								1					1
15. Pigeons.....	1											1	1
16. Rabbits.....	2			5	2		1			2	1	5	18
17. Rats.....	1												3
18. Redheaded Woodpeckers.....							1						5
19. Robins.....					1	4			1				6
20. Skunks.....							3			1			1
21. Snakes.....									1	1			2
22. Sparrows (English).....	1			2	1	2		3					14
23. Squirrels.....	1			6	8	8	60	31	12		1		127
24. Toads.....													1
25. Turtles.....					3	1		1					5
Total.....	10	0	0	19	41	28	93	48	35	5	4	10	293
Animals unknown.....					1		1		1				3
Birds unknown.....					5	3	4	1	3				16
Total.....	10	0	0	19	47	31	98	49	39	5	4	10	312
Number of miles.....	50	25	0	75	125	75	100	50	100	25	25	75	725
Average number animals per mile.....	.2	0	0	.25	.38	.41	.98	.98	.39	.2	.16	.13	.43

Crows have apparently found that a considerable amount of food can be secured along such highways and will very frequently be seen feeding on the carcasses of animals that have been killed by passing automobiles. They will often drag the carcass of a rabbit or other animal or bird off the highway where it can be fed upon with less disturbance. As most of their feeding is done in the early morning, they had in most cases removed only a few animals before the counts were made.

There are several matters of interest in connection with the figures presented. It is quite evident from these figures as well as from previous observations that most of the animals are killed on highways during the months of April to October inclusive. One of the surprising things to those who have occasionally observed the dead animals along highways is the number of English sparrows. These small birds are seen only when driving slowly but are usually completely overlooked if a car is traveling at 35 to 50 miles per hour.

It was quite surprising to note the uniformity of numbers of animals killed each year, particularly in the case of cats and gophers, which varied very little during any of the three years when the observations were made. It seems quite evident from these observations that the only game animal which is killed in any number is the rabbit. The killing of cats can be considered beneficial as they are notorious destroyers of birds and small game. The same may be said of the killing of English sparrows.

TABLE III—Dead Animals on a 25-Mile Stretch of Illinois Highway.

January 1, 1932 to December 31, 1932.

Number of observations.	0	3	3	3	6	2	5	4	4	3	2	0	35
Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
ANIMALS OR BIRDS.													
1. Blackbirds.....					1	1				1			3
2. Cat Birds.....													1
3. Cats.....		1	1	1	2	1	4	1	2	1			14
4. Chickens.....			1	1	3	4	3	3	4	2			23
5. Dogs.....				1			1						2
6. Flickers.....								1					1
7. Frogs.....									1				1
8. Gophers.....				1	15	2	10	4	6	4			42
9. Guinea-fowl.....				1									1
10. Junco.....				1				2					2
11. Meadow Lark.....		1							1				2
12. Mice.....						1							1
13. Owls (Screech).....				3	6		5	2	3	3	9		33
14. Rabbits.....		2		1	1					1			3
15. Rats.....				1	1	2		1					4
16. Redheaded Woodpeckers.....					3	1	3						7
17. Robins.....									2				2
18. Skunks.....					6	4		1	4				15
19. Snakes.....													
20. Sparrows (English).....		1	1	4	27	13	68	37	17	5	2		175
21. Thrashers.....						1							1
22. Turtles.....						2	1	1					4
Total.....	0	5	3	14	65	30	99	54	39	17	12	0	338
Animals unknown.....							2	2		1			7
Birds unknown.....			1	3	3	5	10	5	1	2	2	0	32
Total.....	0	5	4	18	69	35	111	61	40	20	14	0	377
Number of miles.....	0	75	75	75	150	50	125	100	100	75	50	0	875
Average number of animals per mile.....	0	.07	.05	.24	.46	.7	.88	.61	.4	.26	.28	0	.43

Judging from these data the automobile is not appreciably reducing the numbers of any of our song or insectivorous birds. Of the total number of known animals found dead on this stretch of highway (918), 628 or 68.4 per cent were blackbirds, cats, gophers, mice, rats, and English sparrows. All of these from the human standpoint are more or less undesirable. Reasoning along this line there is grounds for our saying that the automobile is of benefit in reducing the undesirable animals of this region.

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TABLE IV—Counts of Dead Animals Found on Highways During a Three-Year Period.

May 1, 1930 to December 31, 1932.

Number of observations.	20		29		35		84
Year.	1930		1931		1932		Total.
	No.	Average number per mile.	No.	Average number per mile.	No.	Average number per mile.	
ANIMALS OR BIRDS.							
1. Blackbirds.....	1		8		3		12
2. Bluejays.....			1				1
3. Catbirds.....					1		1
4. Cats.....	10	.02	14	.019	14	.016	38
5. Chickens.....	31	.062	30	.041	23	.026	84
6. Dogs.....			2		2		4
7. Doves.....			1				1
8. Flickers.....	5		6		1		12
9. Frogs.....					1		1
10. Gophers.....	37	.074	39	.053	42	.048	118
11. Guinea-fowl.....					1		1
12. Hawks.....			2				2
13. Junco.....			1		1		2
14. Meadow Lark.....	3		1		2		6
15. Mice.....	1				2		3
16. Moles.....			1				1
17. Muskrats.....	1						1
18. Opossum.....			1				1
19. Owls (Screech).....	1		1		1		3
20. Pigeons.....			1				1
21. Rabbits.....	22	.044	18	.025	33	.038	73
22. Rats.....	3		3		3		9
23. Redheaded Woodpeckers.....	7		5		4		16
24. Robins.....	1		6		7		14
25. Skunks.....	2		1		2		5
26. Snakes.....	5		14		15		34
27. Sparrows (English).....	146	.292	127	.175	175	.200	448
28. Squirrels.....	2		1				3
29. Threshers.....	4				1		5
30. Toads.....	1		5				6
31. Turkeys.....	1						1
32. Turtles.....	3		4		4		11
Total.....	287		293		338		918
Animals unknown.....	12		3		7		22
Birds unknown.....	18		16		32		66
Total.....	317		312		377		1,006
Number of miles.....	500		725		375		2,100
Average number animals per mile.....	.634		.43		.43		.48