

Winter Moose Pose Highway Hazard



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THE STATE TROOPER is puzzled. He is attempting to interview a man who has struck a moose with his automobile. The man keeps repeating "I don't know where that moose came from. All of a sudden, it was there and I couldn't stop in time to avoid hitting it!" Although the officer may not comprehend why the gentleman could not stop, the circumstances surrounding the collision are very probably as stated.

Moose are ungainly looking animals, but they can cover ground in a hurry as anyone who has been chased by a moose can testify. Furthermore, their coloration blends very well with roadside brush, even in the winter and particularly during the night hours. This allows them to move from a concealed area close to the highway and onto the road in the blink of an eye. Human reaction time is too slow to avoid collision when vehicles are traveling at highway speeds, especially when the highway may be coated with ice.

During the winter months, car-moose collisions increase drastically. For example, in 1964 along a four-mile stretch of an Alaskan highway, eight moose were killed by cars between April and October, but 36 were killed between November and March.

Obviously, everyone would prefer to avoid this costly conflict which causes so much damage to men, machines and moose. The question is: How?

In 1965, efforts were made to solve the problem on the Fort Richardson Bypass, one of Alaska's most troublesome highways for car-moose collisions.

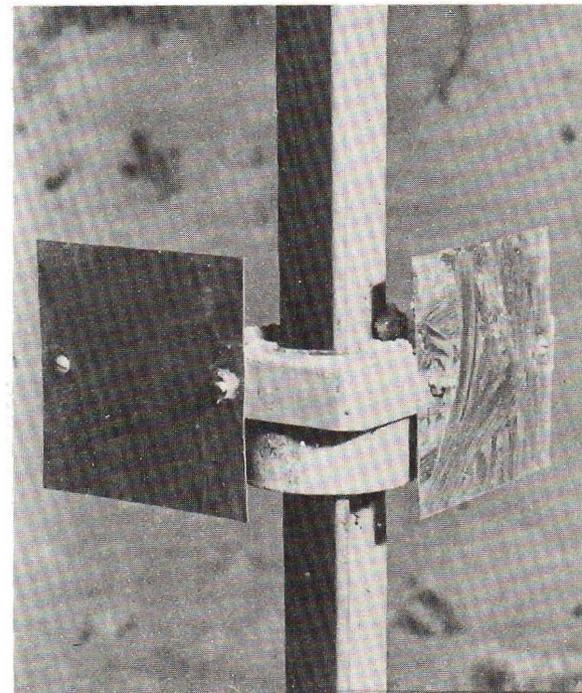
Mirrors designed to reflect car headlights to the side of the road were installed along the highway. The theory was that the reflected light would stop the moose temporarily at the side of the road while the vehicle passes.

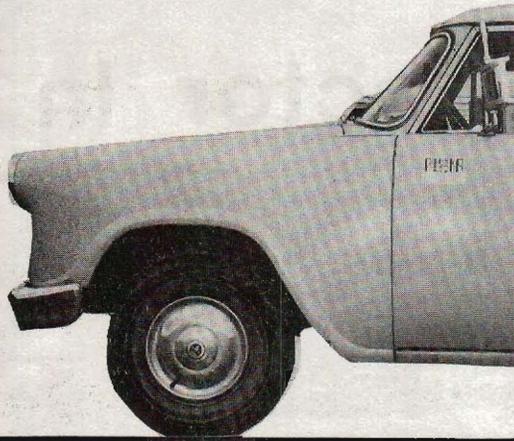
Initially, the data looked hopeful. The total car-moose collisions on the Fort Richardson Bypass dropped drastically from 54 in 1965 to 24 in 1966. In 1967, 26 moose were killed by vehicles. In 1968, however, with mirrors still installed and maintained, the number of car kills rose to 47. By 1969, the kill dropped again to 23, but in 1970, rose to 49.

Biologists examined the data, and concluded that the mirrors, the factor which did not change, were obviously not influencing the number of kills recorded. Careful record checking revealed a highly probable cause for the drastic fluctuation. The mirrors had been erected in October of 1965, and in November of 1965 an antlerless moose season was held in the area. Road kills are normally higher in December than in November; but in 1965 the trend reversed itself on the Fort Richardson Highway, with 15 moose

killed in November and 10 in December. In 1966, the 1965 antlerless moose season was truly reflected in the car-moose collision rate, which was lowered by more than 50 per cent. The same held true for 1967, but during 1968, antlerless moose seasons were cancelled on Fort Richardson and car kills in the area rose to 47. Another

MOOSE MIRRORS--Mirrors placed along Alaskan highways were designed to prevent moose from wandering onto the roadway. (U. S. Army photos)





antlerless hunt was held in the Fort Richardson area in February of 1969, and that, coupled with a mild winter, resulted in a car kill of only 23 moose.

Antlerless moose seasons were cancelled again in 1970 and 1971. The final tally is not yet available for 1971, but the trend in 1970 of 49 moose-car kills shows the upswing is underway again. It is interesting to note that moose killed by cars in game management unit 14C during the 1970-71 fall-winter period now exceed the total hunter harvest in that area. It is probable that the trend will continue until the moose are reduced, either by a natural mortality factor such as overpopulation and resulting starvation, or the temporary lowering of the population by limited antlerless moose seasons.

The temporary lowering of the moose population, or a reduction of moose numbers for a period of several months through the usually difficult winter does not cause a permanent decrease in the total moose population of the area. In the spring, the female moose usually produce more than enough calves to bring the population back to its original strength, or even higher. The automobile kill on Fort Richardson during years when antlerless seasons were not in effect reflects the ability of a moose population to rebound and replenish its numbers.

Another possible method which may be employed to prevent car-moose

collisions is a suitable barrier, such as a sturdy fence, erected parallel with the highway along much of its length. There are several problems associated with this technique. The primary problem is interference with the annual movement of moose to their winter range.

Another problem is interference with the spring migration, when female moose attempt to return to mountainous retreats with their new calves. On occasion, the female moose can jump the fence, but the calf cannot. Moose that do gain access to a fenced highway at an intersection are almost certain to be struck by a vehicle before they can find their way out of the area.

Several examples of this latter problem have come to the attention of the Alaska Department of Fish and Game officials during the past year or two in the Eagle River area near Anchorage. Officials of the Alaska Department of Fish and Game and the Department of Highways are presently working on this rather thorny problem, but possible solutions examined to date, such as culverts under the road, overpasses, etc., seem economically unfeasible; in addition, the animals would probably refuse to enter or pass over such structures. It is highly probable that a limited access highway without fences may prove to be the best answer.

MOOSE MESS--Contact between moose and automobiles can cause considerable damage to the vehicle as this photo shows.



Several states such as Colorado, Michigan, New Jersey and Pennsylvania have had problems with mirrors. Maine, Washington, Missouri and Idaho have reported good success, however. The mirrors have been removed from the Fort Richardson Bypass because the evidence shows that they were of little value in reducing car-moose conflicts. Many of the states which experienced problems have reverted to Alaska's present solutions.

The first solution is to define areas of heavy moose crossings and place a sign to warn motorists of the highly probable collision area. Second, efforts are made to inform the public about the problem. Third, the best way to avoid a car-moose conflict is to slow down in heavily traversed moose areas. By decreasing speed, one has a much improved chance of stopping the vehicle before a collision does take place. If a collision does occur, the damage to the vehicle and/or its occupants will be greatly reduced. Human fatalities have resulted from car-moose collisions in Alaska.

It also appears, as a fringe benefit, that there are fewer car-moose collisions in years when there are limited antlerless hunts. ■

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