

## Factors influencing a motorist's ability to detect deer at night

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### **Abstract**

Most deer–vehicle collisions (DVCs) occur at night when deer are active and the ability of motorists to see them is impaired. The objective of this study was to examine the ability of motorists to detect deer at night and examine select factors which may influence detection distances. We examined the ability of motorists to detect deer at night and the factors that influence detection using deer decoys, volunteer motorists, and a series of driving courses. Deer decoys were detected at significantly greater distances when located on the right rather than on the left side of the road and when <10 m from the road's edge. Detection distances were significantly longer for high-beam headlights versus low-beam headlights. Moving decoys were detected at similar distances to stationary ones. Additionally, decoys were detected at greater distances in the absence of reflectors than in their presence. The frequency of nocturnal DVCs can be reduced by using high-beam headlamps and minimizing the number of roadside reflectors, signs, and other bright objects that distract the driver's attention.

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