

Myths and Misconceptions

Drivers should always swerve to avoid colliding with wildlife.

False. Drivers hitting other vehicles or losing control of their own vehicle when they swerve to avoid collisions with animals cause more collisions than collisions with wildlife.



Instead, if a large animal is on the road directly in the path of the driver, the best course of action is to drive straight and firmly apply the brakes and attempt to graze the animal. The one exception is moose, whose size and elevated body mass make it extremely deadly in a head on collision. If drivers are not at risk of hitting another vehicle or losing control of their own vehicle, they should aim their vehicle towards the flanks of the moose. For smaller wildlife, if there is a choice, it is better to hit the animal rather than put the life of the

If a moose is on the road directly in the path of the driver and the driver is not at risk of hitting another vehicle or losing control of their own vehicle they should aim their vehicle towards the flanks of the moose. driver or the lives of others at risk. Small, agile wildlife may also run out of the way if drivers drive in a straight and predictable manner.

Deer whistles are an effective means to avoid collisions with deer.

False. A number of studies indicate that there is no evidence that deer whistles have any discernable effect on deer behaviour (cf. Romin and Dalton 1992; Hedlund et al. 2004; Knapp et al. 2004; or Valitzski et al. 2009).

There are two general types of deer whistles, airactivated and electronic. Both are intended to emit **ultrasonic** noise (beyond the human range of hearing) at frequencies within the deer hearing range (note that some whistles emit frequencies that can be heard by both humans and deer). Air-activated devices are intended to produce these high-pitched sounds when air passes through them at vehicle speeds of approximately 50 km/h or greater. Electronic devices rely on electricity to emit these frequencies. The purpose of both types of devices is to emit noise that gains the attention of deer, to either stop them or scare them away.





Make safe driving second nature

The above studies offer a number of reasons that may explain the ineffectiveness of deer whistles. To begin, not all devices either produce the proper sound, emitting too high or too low a frequency. Among airactivated devices, it has been found that some do not produce any sound at all regardless of vehicle speed. Furthermore, air-activated devices typically do not work at speeds below 50 km/h. Another issue cited was that even when deer appeared to hear the noise, they did not necessarily interpret it as a warning. For instance, some deer even run towards the sound. Finally, studies have found that some devices do not emit sounds at great enough distances thus the noise may not be heard by deer from fast approaching vehicles.

Overall, drivers should not rely on deer whistles as an effective means to avoid collisions with deer. Instead, drivers should be alert, drive within appropriate speed limits, pay attention to their surroundings, and remember that deer movements are unpredictable.

Drivers should always honk the horn and flash the lights at wildlife on or near the road.



False. Honking the horn may startle animals to run across the road or directly at the vehicle instead of running away.

In some cases, it may be better not to honk the horn or flash the lights at animals on or near the road. For instance, when there are other vehicles on the road, these actions may cause animals to dart in front of other traffic and cause a collision. Another instance may be when there is not much distance between the vehicle and wildlife. At night, any source of light can result in over stimulation of the eyes in some animals; therefore, lights flashing between bright and dim may have no effect and the animal may remain temporarily blinded. Once the animal has left the road, drivers can relax and ignore it.



False. Animals are unpredictable and drivers should be cautious and alert whenever animals are in the vicinity.

An animal may choose to turn around and re-cross the road, therefore causing a hazard. When the animal reaches the other side of the road something may startle it, such as another vehicle on the other side of the road or something in the brush, which causes the animal to bolt back onto the road in front of you. Some animals simply prefer to walk on the road. Equally important is that many animals travel together, such as deer, which travel in herds or females with their young, such as a duck and her ducklings. When one animal appears, watch for other animals following behind or in the vicinity. In general, drivers should always be prepared for the unpredictable nature of animals.

Collisions with animals are more likely to take place in rural areas.



False. The majority of wildlife-vehicle fatal collisions occur on highways (cf., 2000-2014 fact sheet).

Although the majority of wildlife is found in rural areas, the presence of these animals is becoming an increasing concern in cities and suburban areas. There are a number of reasons for these concerns. As urban areas expand, they encroach further into wildlife areas, dispersing and displacing animals from their natural habitats. These animals are forced into other animal habitats, increasing the competition for food and other resources. Greater numbers of vehicles and road use also contribute to increased chances of collisions with wildlife animals. For some wildlife, such as deer, vehicles are the leading cause of death. Drivers therefore are likely to come across wildlife in all types of areas, which means that drivers must be alert and know the proper evasive action for the different animals they may encounter.

I do not need to report collisions with animals unless there is significant property damage or injuries to people.



False. There are a number of important reasons to report collisions with animals even when the situation does not meet legal reporting requirements for crashes or will not be used for an insurance claim. As a basic requirement, all collisions resulting in injury to a person(s) must be reported to either the local police or RCMP. In terms of property damage, most jurisdictions within Canada require that you report a collision if damage exceeds \$1000. However, this differs in certain areas. For instance, some jurisdictions set different damage amounts or stipulate that reporting must occur if the animal was over a certain weight rather than the estimated damage being over a particular amount. Check with your local provincial or territory government agency to determine their requirements. Beyond the above situations, collisions with wildlife also should be reported to the appropriate agency if the animal was seriously injured. An injured animal, particularly one that is dazed and confused but still mobile, may wander across the road. This could pose a danger to the animal or other drivers, especially if the animal wanders into traffic or later collapses on the road. Injured or deceased animals will attract other animals to their location, which means increased animal activity close to or on the road. Remember that you have a duty to ensure that your collision does not

cause a hazard for other drivers. If the collision occurs near or within a populated area, injured wildlife that is still able to move around may also pose a threat to people and pets in its heightened state of fear and anxiety if it comes in contact with them. Injured wildlife also may suffer needlessly due to the collision where a professional may be able to locate and either assist or put down the animal.

Another important reason to report collisions with wildlife is to improve efforts to reduce these types of collisions and monitor threatened wildlife. The information gathered can assist in the design of safer roads, development of better wildlife road crossings, tracking of threatened animal species, improvement of vehicle safety technology, and reduction of harm to animals and people. Therefore, although it may not be a requirement to report certain types of wildlife-vehicle collisions, such as collisions with minimal damage, for the above reasons drivers still should report the incident to local animal control offices, conservation groups, or other appropriate agencies.

Drivers should respond to small/medium wildlife on the road in the same manner they would to large wildlife.

False. Smaller animals pose a different type of hazard on the road in comparison to larger animals. Their smaller size means that they are not as likely to cause as much damage to vehicles or injuries, but they are much more numerous and still pose a hazard to drivers. If you come across small wildlife, do not swerve! Drivers who swerve are more likely to hit another vehicle or obstacle or lose control of their car. Instead, ease off on the gas – do not slam on the brake. Drivers behind you may not see the small wildlife and may not be prepared to stop suddenly, thus hitting you instead. If you cannot safely avoid hitting the small animal then it is better to hit it rather than to put your life or the lives of others at risk of injury or death.



A large number of small animals are very agile and have greater manoeuvrability than vehicles, such as squirrels or birds. If one of these animals appears in your path, steer in a straight and predictable manner. These agile animals may attempt to avoid your vehicle.

If you strike a small animal, report it to local animal control or conservation office and, if the injured animal or carcass may pose a risk to other drivers on the road, inform transportation authorities or the police/RCMP (if necessary). Remember that you have a duty to ensure that your collision does not cause a hazard for other drivers. If possible and only if it is safe to do so, move small animals off to the side of the road. If this is not possible, mark the area with roadside reflector triangles, flares, or other warning devices so that other drivers can avoid the animal hazard.

Roads and vehicle collisions have little impact on wildlife.

False. With increasing construction of roads and other transportation corridors, as well as greater numbers of vehicles on the road, all types of wildlife can be affected to various degrees. Roads divide animal habitats and act like a barrier to movements between the various needs of wildlife such as water and food sources or migration and mating activities. Roads can also disrupt natural habits, causing changes in breeding, feeding, or migration patterns. Most species of wildlife have difficulty adapting to the changes, which can cause declines in numbers. Vehicle collisions are the primary cause of death among deer. Wildlife road mortality has been listed as a substantial threat for many species at risk in Canada. Indeed, in Ontario, 18 reptile species, three amphibian species, 10 bird species, two small mammal species, and one insect species are all labeled as at risk and road mortality has been documented as a threat for these species (Ontario Road Ecology



Group 2010). The biggest threat to turtles is humans, either through poaching or through encroachment into habitats by roads, which causes vehicle-related mortality. Human development and encroachment into wildlife habitats is increasing the presence of wildlife in urban areas. Wildlife species are important to Canada's culture, economy, tourism, agriculture, and history to name just a few areas; therefore, strategies to encourage co-habitation will be of benefit to people and wildlife alike.

Strategies to encourage co-habitation between people and wildlife would benfit Canada's culture, economy, tourism, agriculture, and history.

We know a lot about wildlife-vehicle collisions and there are a lot of data and information on the issue.

False. There are several limitations to our knowledge on wildlife-vehicle collisions, which makes it difficult to help improve the issue. Data (e.g., statistics) and information (e.g., impact) on wildlife-vehicle collisions are very limited in Canada and many other countries. For instance, not all agencies or organizations collect data on collisions or collect it in the same manner. To illustrate, some law enforcement agencies may only collect basic information at the scene of a collision, such as time of day and location while in another area they may collect time of day, GPS coordinates, and type of animal. When possible, scientists and citizenscientists may also collect information which is likely to be more detailed for the purposes of research but is often limited to small areas and specific animals. Furthermore, many collisions, particularly instances of small property damage are not reported.

Collisions with small and medium animals also tend to go unreported due to lack of damage to vehicles or injury to people while some drivers may be unaware that they hit a small animal. Additionally, the carcasses of small and medium animals alongside roads tend to be removed or consumed by predators more quickly than larger animals, or can be difficult to find or identify. The impact of roads on mortality rates of small and medium wildlife is therefore likely to be substantially higher than what is recorded by agencies or organizations that collect this information. Estimates of collisions and the impact on people and wildlife are much higher than is currently reported; however, more data and information on the issue is needed. To help improve information gathering, look up agencies and organizations within your area that collect these types of data and find out what you can do.



For more information on wildlife-vehicle collision research, visit **www.wildliferoadsharing.tirf.ca**.

Sources

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Project Information

The Wildlife Roadsharing Resource Centre (WRRC) is a centralized source of information, research, education, resources, and many other features to answer any questions you may have regarding wildlife-vehicle collisions.

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Visit **www.wildliferoadsharing.tirf.ca** to learn more.

