Wildlife collisions put a dent in road safety

In September 2020, the United Nations (UN) adopted a resolution to halve road traffic deaths and injuries by 2030 (1). A Global Plan for the Decade of Action for Road Safety (2) was developed emphasizing the importance of a holistic approach to road safety, including the improvement of the design of roads and vehicles and the enhancement of laws. However, the Global Plan overlooks wildlife-vehicle collisions.

Millions of wildlife-vehicle collisions occur every day around the world (3, 4), causing countless human deaths and injuries as well as high vehicle damage costs (5). The collisions also threaten biodiversity (4, 6), given that virtually all species that live in the vicinity of roads are at risk. Hence, reducing wildlife-vehicle collisions goes hand in hand with improving road safety, while also promoting biodiversity conservation.

In line with the UN resolution, we suggest promoting simple but effective mitigation actions. Installation of proper fencing linked to existing road-crossing structures (such as culverts for water drainage) can prevent wildlife crossings on the road (7). Given that most wildlife-vehicle collisions occur at night, nocturnal traffic should be substantially decreased or slowed, where possible. Such measures should be integrated in road construction and mitigation legislation. More ambitiously, the car industry should target the integration of Artificial Intelligence technology, which could help to prevent collisions by automatically detecting animals approaching the road and warning the driver in real time (8). Adopting plans and policies to reduce wildlife-vehicle collisions will be a step toward meeting the UN goal of a sustainable transport system.

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