

## Permanent daylight savings time results in fewer car accidents with animals

November 2 2022



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The practice of moving our clocks forward, resulting in a later sunset, reduces night-time associated car accidents with deer by 16 percent. Researchers developed a model, publishing November 2 in the journal



Current Biology, that demonstrates the benefits that permanent daylight savings time has, not only in saving animal lives but also in reduction of collision costs and human injuries.

"We saw these huge, abrupt shifts in <u>human activity</u> associated with the timing of sunrise and sunset, so it got us thinking if humans are responding to clock time, whereas animals are responding to the daylight time, does that then create more opportunities for human wildlife conflict?" says first author Calum Cunningham, a biologist from the University of Washington School of Environmental and Forest Sciences.

Using data from 23 state agencies from the US Department of Transportation, Cunningham's team analyzed 1,012,465 deer-vehicle collisions and 96 million hourly traffic observations across the United States. Their analysis showed that collisions are 14 times more frequent 2 hours after sunset than before. Even more striking, the rate of deer-vehicle collisions increased by 16 percent the week following the change to standard time.

Taking these numbers, the researchers were able to predict that if daylight savings time became year-round it would prevent 36,550 deer deaths, 33 human deaths, 2,054 human injuries, and \$1.19 billion in collision costs annually. The data on car collisions is most likely vastly underreported, and these numbers are likely to be much larger than stated.

"It surprised me how striking this pattern was, of how much more likely deer are to get struck in the hour or two after darkness," says Cunningham. "This one-hour shift in human activity could have such a significant effect."

**More information:** Calum X. Cunningham, Permanent daylight saving time would reduce deer-vehicle collisions, *Current Biology* (2022). DOI:



<u>10.1016/j.cub.2022.10.007</u>. <u>www.cell.com/current-biology/f ...</u> <u>0960-9822(22)01615-3</u>

## Provided by Cell Press

Citation: Permanent daylight savings time results in fewer car accidents with animals (2022, November 2) retrieved 19 April 2024 from <a href="https://medicalxpress.com/news/2022-11-permanent-daylight-results-car-accidents.html">https://medicalxpress.com/news/2022-11-permanent-daylight-results-car-accidents.html</a>

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