

Committee: Education, Energy, and the Environment

Testimony on: SB 635 Wildlife – Protections and Highway Crossings

Position: Support

Hearing Date: March 4, 2025

The Maryland Chapter of the Sierra Club supports SB 635, as it lays the groundwork for long-term efforts to improve wildlife passage and protect rare, threatened, and endangered animals from becoming roadkill.

In Maryland, five of our 18 turtle species suffer significant mortality due to vehicle strikes, including the diamond-backed terrapin, the state reptile and mascot of the University of Maryland College Park. Vehicle collisions significantly impact four other species: the wood turtle, the northern map turtle, the painted turtle, and the eastern box turtle.¹

All four of the bill's main provisions – formalizing the State's wildlife corridors coalition, establishing a fund for related income, prioritizing public education, and guiding counties and municipalities on wildlife corridors in their planning – include provisions that address the need to protect our endangered turtles and amphibians by providing passageways under roads.

With this bill, the Department of Natural Resources (DNR) and the State Highway Administration (SHA) will cooperate with legislators and outside specialists in studying, planning, and educating the public for additional and improved roadway culverts. The long-term effect will be to allow our wildlife to conduct their natural movements, for foraging and reproduction, with less risk of mortality from vehicle traffic.

Maryland's reptiles and amphibians are especially vulnerable to vehicle collisions because they are slow-moving. Drivers instinctively stop or swerve to avoid hitting these animals. The results range from fender-benders to multi-car collisions. In 2023, for example, a turtle crossing in Florida caused a seven-car accident.²

Road mortality is one of the greatest contributors to declines in freshwater turtles in North

¹ Cunningham, H.R., and N.H. Nazdrowicz, eds., *The Maryland Amphibian and Reptile Atlas* (Johns Hopkins Press, 2018). https://news.maryland.gov/dnr/2019/04/30/maryland-amphibian-and-reptile-atlas-now-available/

² <u>Motor Vehicle Accidents Involving Turtles (lakejacksonturtles.org); https://www.nj.com/news/2022/06/slow-moving-turtle-sparks-3-car-accident-on-nj-road.html; https://www.wtsp.com/article/news/regional/florida/florida-driver-stops-for-turtle-car-crash/67-25d3f9ee-d16b-4445-9b1b-2a04e795a550.</u>

America.³ In a Maine study, more than 50 percent of all roadkill animals were turtles, frogs, and salamanders.⁴ Overall, turtle populations in the eastern U.S. have suffered a 10 to 20 percent loss from road kills alone.⁵ Females are especially vulnerable because they travel further than males and move more slowly while carrying 8-10 eggs. Many turtles don't reach reproductive age until about 15 years old, so losing one mature female is a major blow to the future population.

Fortunately, SHA has already demonstrated a commendable ability to create wildlife passageways under state roads. In 2012, the SHA received a federal DOT Environmental Toolkit Award for an "Exemplary Ecosystems Initiative," citing innovative culverts under the Intercounty Connector (ICC). These culverts are frequently utilized by turtles, along with deer, raccoons, opossums, squirrels, and foxes (the last of which help control our rodent populations). The ICC's fencing directs wildlife to these culverts and limits their access to the roadway. Because they usually follow waterways, turtles and salamanders often need only adjustments to existing pipes and culverts that already channel streams under roadways.

In addition to protecting Maryland's turtles from vehicle traffic, the improved stream culverts will also help our brook trout. Although they aren't targeted in the legislation, brook trout are treasured by Marylanders who enjoy fishing and are a vulnerable/watchlist species in the state.⁷ In the course of foraging and reproducing, they need to swim both upstream and downstream in creeks channeled under roadways, where older culverts often block upstream passage.⁸

The brook trout's range overlaps with that of the wood turtle, an imperiled state-rare species in Maryland, so protecting one will protect the other. A recent study in New York and Connecticut showed that wood turtles "commonly come in close proximity to the roads intersecting and bordering a stream corridor." The study recommends that "measures that facilitate safe passage beneath roads should be implemented whenever roads are present near occupied wood turtle habitat."

For all these reasons, the Maryland Chapter of the Sierra Club supports HB 1129 and encourages a favorable report.

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³ Hagani, J.S., et al., "Movement Ecology of the Imperiled Wood Turtle (*Glyptemys insculpta*) in a Lower Hudson River Watershed," *Chelonian Conservation and Biology*, 2021, 20(2). <a href="https://bioone.org/journals/chelonian-conservation-and-biology/volume-20/issue-2/CCB-1490.1/Movement-Ecology-of-the-Imperiled-Wood-Turtle-Glyptemys-insculpta-in/10.2744/CCB-1490.1.short

⁴ <u>https://maineaudubon.org/wp-content/uploads/2020/11/From-Maine-Audubon.MOHF_finalreport_TURTLES2021_f.pdf</u>

⁵ "Turtles Decline Due to Roadkill," ABC News, August 9, 2001. https://abcnews.go.com/Technology/story?id=98351&page=1#:~:text=He%20found%20that%20turtle%20populations%20in%20the%20Northeast%2C,20%20percent%20mortality%20rates%20due%20to%20traffic%20encounters

⁶ https://www.environment.fhwa.dot.gov/pubs_resources_tools/resources/eei_awards/2012md_1.aspx_

⁷ Maryland Wildlife and Heritage Service, "List of Rare, Threatened, and Endangered Animals of Maryland," November 2023 https://dnr.maryland.gov/wildlife/Documents/rte_Animal_List.pdf

⁸ Poplar-Jeffers, I.O., et al, "Culvert Replacement and Stream Habitat Restoration: Implications from Brook Trout Management in an Appalachian Watershed," *Restoration Ecology*, 2009. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526-100X.2008.00396.x;. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526-100X.2008.00396.x; https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526-100X.2008.00396.x; https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526-100X.2008.x; https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1526.x

⁹ Hagani, J.S., et al., op. cit.

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