



ABOUT THIS PROJECT

PROJECT NAME: [Assessment of Wildlife-Road Conflicts for Protected Species](#)

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RESEARCH IN PROGRESS

Assessing road risks to protected wildlife to guide Iowa DOT's mitigation efforts

Roads present significant hazards to wildlife, including species that are federally protected due to declining populations. Eighteen species of amphibians and reptiles are threatened or endangered in Iowa, and an additional 38 are considered at higher risk for road mortalities because of their specific habitat needs and behaviors. Roadways may dissect areas used by wildlife populations for breeding, nesting, and foraging across changing seasons.

During new construction projects, Iowa DOT routinely takes precautions to avoid or minimize impacts to protected species. But risks to wildlife on existing infrastructure are not typically evaluated unless a new project is scheduled. Iowa DOT wanted to understand the best ways to prioritize efforts to reduce negative impacts of roads on protected wildlife.

"We need to know which road sections are posing the greatest conservation risk for imperiled amphibians and reptiles," explained Brock Struecker, project manager, Iowa DOT Protected Species and Natural Areas Program. "Then we can identify the most effective and practical mitigation strategies for the specific situation."

To identify high-risk roadway areas, researchers are using geographic information system layers showing predicted habitat, road characteristics, and wildlife mortality to create geo-spatial models. Field data collected in 10 "hot spots" during both spring and summer will include surveys and monitoring of protected wildlife populations; identification of road size, existing infrastructure, and traffic intensity; and topography, vegetation, and hydrology assessments.

Strategies tailored to assist or prevent wildlife crossings can be identified once the relevant information is gathered. "These results will enable the production of an interactive web platform and framework to prioritize mitigation locations and decisions," Struecker said.

The research is expected to conclude in July 2027.

To learn more about this project and subscribe to updates, visit [Idea #3880](#).

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