

Alberta Conservation Association
2024/25 Project Summary Report

Project Name: Pronghorn Road Crossing Enhancement (Pronghorn Xing)

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Project Leader: Paul Jones

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Partnerships

Canadian Wildlife Federation

Government of Alberta

Miistakis Institute

Nature Conservancy of Canada

Saskatchewan Government Insurance

Saskatchewan Ministry of Environment

Saskatchewan Ministry of Highways

The National Fish and Wildlife Foundation with support from the Bezos Earth Fund, Burger King, Capri Holdings, and Cargill

Key Findings

- We began the process of creating awareness and support for crossing structure across the Trans-Canada Highway. We worked with the Cornell Lab of Ornithology Conservation Media team to develop a short video that highlights the need for connectivity in the prairies of Alberta and Saskatchewan, promoting the need for crossing structures across the Trans-Canada Highway. We worked with an engineering company to design what a crossing structure in the prairies would look like to assist in determining what one would cost to build.
- We assessed in the planning of the Canadian Ecological Connectivity Conference to be held in April 2025 in Banff, Alberta.

Details

Among the diversity of prairie wildlife, the pronghorn is the most specialized and representative large mammal. Within the Northern Sagebrush Steppe of Alberta, Saskatchewan, and Montana, 55% of collared pronghorn made seasonal migrations between summer and winter ranges. Along the migration pathway, pronghorn navigate their way across primary and secondary highways that are often fenced on both sides, resulting in pinch points where animals bunch up. These pinch points along the migration pathway are a formidable challenge for migrating pronghorn.

To address this migration challenge, a citizen science project called Pronghorn Xing was initiated in the spring of 2017. Pronghorn Xing was developed to ground truth seasonal movement pinch points identified by connectivity modelling across highways in the Northern Sagebrush Steppe and increase public engagement in pronghorn science and conservation. Analysis of the pronghorn data collected between November 2017 and June 2020 via the app was completed and potential mitigation sites were presented to stakeholders in a workshop setting. Initially, 16 potential sites were identified along Highway 1 in Alberta and Saskatchewan where road mitigation could improve pronghorn movement. Following a ranking exercise by workshop participants, the number of potential mitigation sites was narrowed down to four in Alberta and three in Saskatchewan. The prioritized mitigation sites in Alberta and Saskatchewan provide a starting point for assessing the feasibility of implementing a wildlife mitigation structure (overpass/wide span bridge).

In 2024, Alberta Conservation Association (ACA), Miistakis Institute, and Canadian Wildlife Federation began work on creating awareness and support for road crossing structures along the Trans-Canada Highway. We worked with the Cornell Lab of Ornithology Conservation Media team to develop a short video that highlights the need for connectivity in the prairies of Alberta and Saskatchewan, promoting the need for crossing structures across the Trans-Canada Highway. We worked with an engineering company to design what a crossing structure in the prairies would look like to assist in determining cost to build. We held our annual Pronghorn Xing Stakeholder meeting where we presented on ACA's pronghorn and mule deer winter survival and migration projects and had a guest speaker from Wyoming present on their work

with crossing structures designed for pronghorn. Lastly, we assisted in the planning of the Canadian Ecological Connectivity Conference to be held in April 2025 in Banff, Alberta.

Photos



Photo 1. Pronghorn doe struck and killed along Highway 61 during winter. Photo: Brad Downey



Photo 2. Pronghorn stuck at the fence on the north side of the Trans-Canada Highway. Photo: Paul Jones



Photo 3. Pronghorn mortality along the Trans-Canada Highway. The doe became trapped in the right-of-way before being struck by a vehicle. Photo: Paul Jones