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Crown Contents

COVER SHOT:
Parke Peak 9,038' rises in the northern Livingston Range of Glacier National Park – photographed from the valley of the Flathead's North Fork.
Susie Graetz photo

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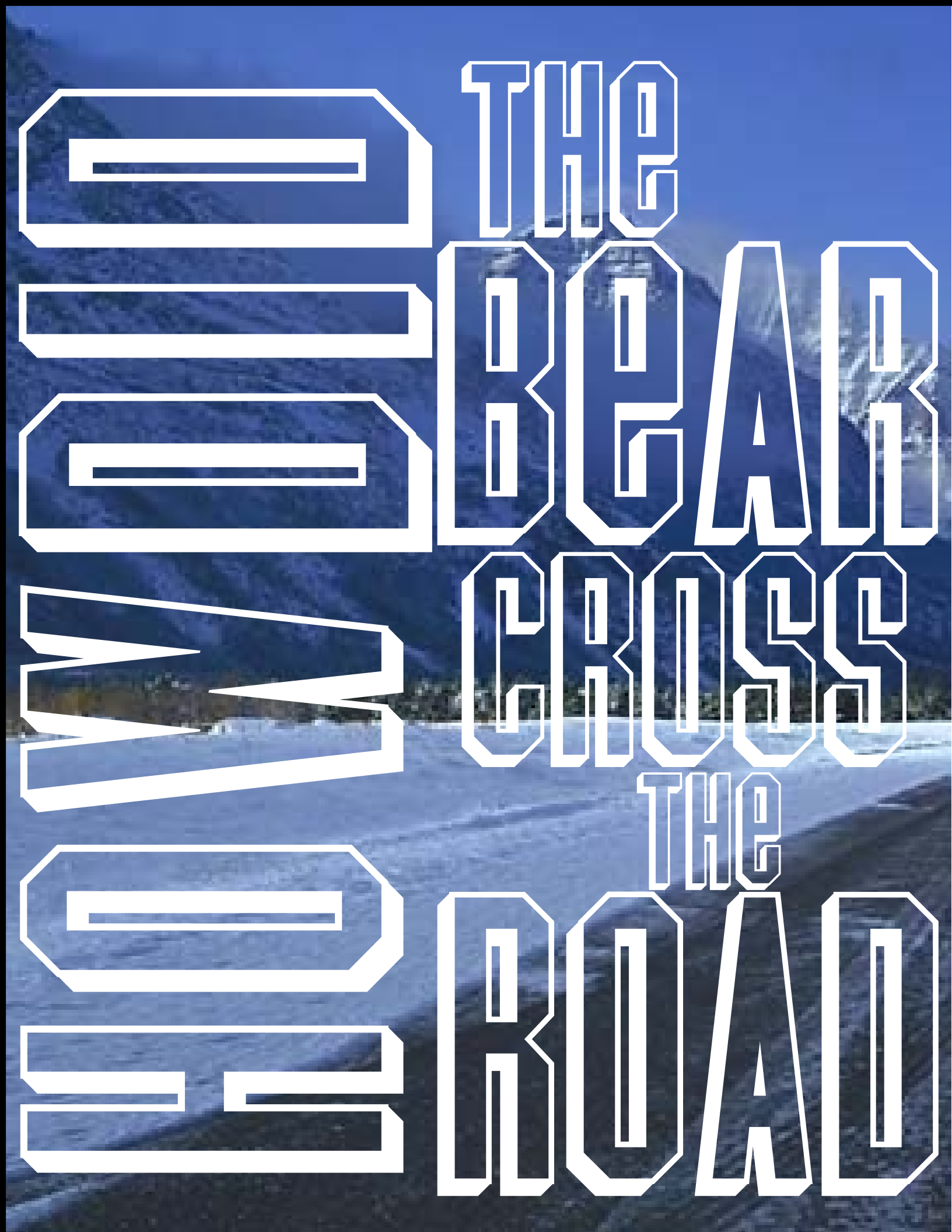
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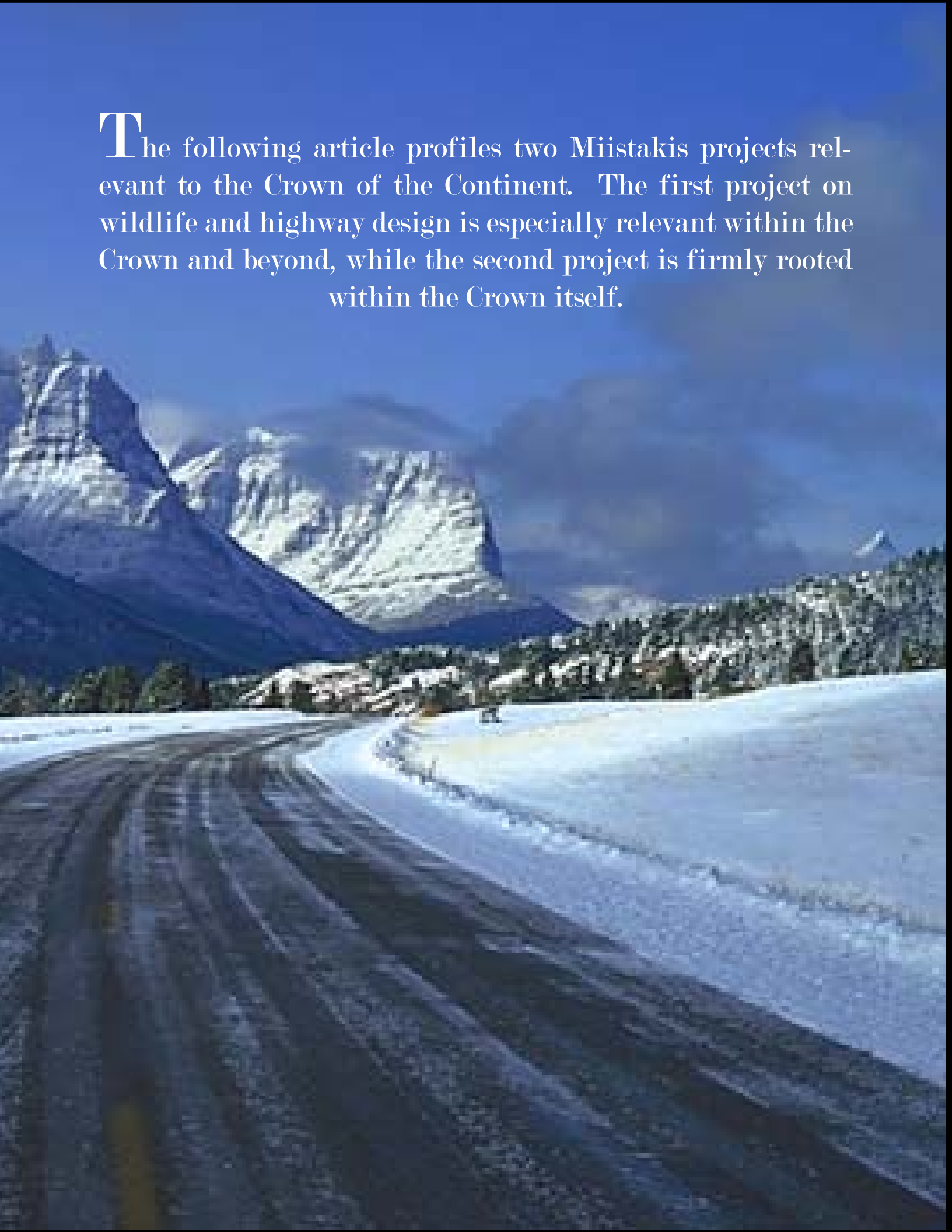
The following article profiles two Miistakis projects relevant to the Crown of the Continent. The first project on wildlife and highway design is especially relevant within the Crown and beyond, while the second project is firmly rooted within the Crown itself.



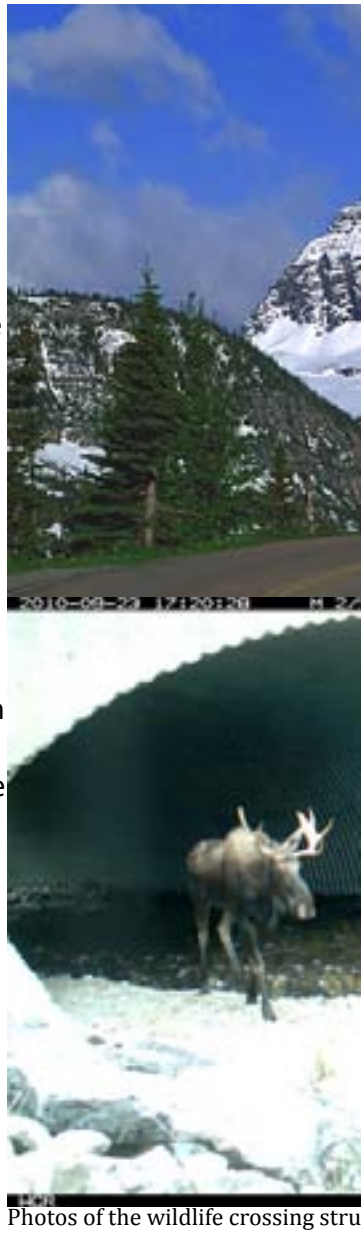
MAKING WAY FOR WILDLIFE IN BANFF NATIONAL PARK AND BEYOND

The Miistakis Institute has partnered with the Western Transportation Institute at Montana State University, Parks Canada, the Wilburforce Foundation and the Woodcock Foundation to carry out an innovative and exciting project in Banff National Park with a focus of getting wildlife safely "across the road." Banff National Park, Canada's first national park, spans 6,641 square kilometres (2,564 square miles) of valleys, mountains, glaciers, forests, meadows and rivers in the Canadian Rocky Mountains. Banff National Park is located in Alberta, and it is situated approximately 128 km (80 miles) west of Calgary— just north of the Crown of the Continent. The Trans-Canada Highway— or TCH— bisects the park through the very heart of the Canadian Rocky Mountains, and has long been recognized as a lethal barrier to wildlife through collisions with vehicles and by reducing animals' abilities to move through the landscape to find suitable habitat, food and mates.

However, over the past 25 years, efforts have been made to reduce the effects of the Trans-Canada Highway on wildlife within Banff National Park through the construction of wildlife overpasses (vegetated structures designed to allow wildlife to move over highways), underpasses (bridge structures that enable animals to pass underneath highways), and fencing designed to keep wildlife off of the highway right-of-way. These "road ecology" issues and solutions are relevant in the Crown where both highways and railways also act as barriers to wildlife movement for a number of species. Currently, an extensive wildlife crossing project to address these barriers is underway on Highway 93 in Montana.

In addition to the construction of the wildlife crossing structures, Dr. Tony Clevenger, the Western Transportation Institute's Senior Wildlife Research Scientist, has been carrying out research and monitoring on these structures to learn what sort of characteristics are important to enable passage by animals that are sensitive to their habitat being fragmented. These species include grizzly and black bears, wolves, lynx and wolverine— species that also exist in the Crown. This research and monitoring project is known as the "Banff Wildlife Crossings Project", and the results of this project are critical to informing how highways should be best designed with both people and wildlife in mind.

The Banff Wildlife Crossings Project has several objectives. The first objective is to collect data on the effectiveness of the crossing structures and the resulting conservation value of wildlife crossing structures in Banff National Park. An important component is to evaluate crossings by wolverine and Canada lynx across the Trans-Canada Highway and their response to newly-constructed wildlife crossing structures. There is little to no information anywhere in North America on whether these iconic subalpine and alpine species are adversely impacted by four-lane highways or if they will use the crossing structures. The second objective is to develop science-based guidelines for designing effective wildlife crossing structures and other practices to keep wildlife safe alongside transportation projects across Canada and North America.



Photos of the wildlife crossing stru
credits are to Tony Clevenger/West

Given the importance of sharing this information with a number of audiences, the remaining two objectives focus

on communication: to present the scientific findings in major international journals, books, workshops and conferences on transportation, conservation and ecology; and, finally, to increase professional understanding and general public awareness of the Banff wildlife crossings. Ideally, success of these final two objectives will result in the development of similar wildlife crossing structures and best practices for highways throughout Canada and across North America.

As it is critical to communicate the findings of the Banff Wildlife Crossings Project to a wide audience, we have developed an outreach and education component for the project. Our goal for this is to increase transportation agencies' understanding of crossing structures and their benefits and community awareness so that other busy roads in Canada, and beyond, benefit from the findings of the Banff Wildlife Crossings Project. This will enable other communities, such as those within the Crown of the Continent, to develop sustainable transportation practices that are designed with both humans and wildlife in mind.

ctures, and animals that use them to safely cross the bustling Trans-Canada Highway in Banff. All photo
tern Transportation Institute. MSU

Miistakis is in the process of developing a communications strategy that will guide the outreach program. Through this strategy we are aiming to ensure that the Trans-Canada Highway wildlife crossing structures are viewed by decision-makers as good investments for motorist safety and wildlife conservation. Additionally, we will generate a greater understanding of, and increased support for, wildlife crossing structures and practices (such as highway fencing) within several audiences including local communities, visitors, and people driving on the Trans-Canada Highway. Finally, we will use the communications strategy to transfer information from the project's research and monitoring component to transportation and natural resource agencies so it can be applied in other regions and local communities.

Some of these initial action items for achieving these goals include: creation of video tours of the wildlife crossing structures to be distributed on the internet through social networks, developing and maintaining a project website, creation of a citizen science monitoring program, presentations of findings to transportation and natural resource practitioners, and public art competitions conveying the importance of wildlife crossing structures.