

Research finds roads reduce grizzly bear survival rates

BY COLETTE DERWORIZ, CALGARY HERALD MARCH 10, 2014 7:16 AM



New research suggests roads through bear country are leading to more grizzly deaths. Photo courtesy Parks Canada/Alex Taylor

Photograph by: Credit: Parks Canada/Alex Taylor

Canmore — Roads and trails criss-crossing grizzly bear habitat in Alberta are leading to higher death rates — particularly for mama bears and their cubs, new research confirms.

Experts at the Foothills Research Institute have analyzed data collected over the past decade by age and sex class to determine the affect roads have on survival rates for grizzly bears.

“The strongest relationship to roads and possibility of death is for females with cubs,” Gordon Stenhouse, research scientist and program leader at the institute’s grizzly bear program, told a Canmore audience during a speaker series event by Bow Valley WildSmart, a conservation program aimed at reducing negative human-wildlife interactions.

Similarly, he said young bears are also more likely to get killed near roadways than older bears.

The research, which is currently undergoing review for publication, provides scientific support for a key recommendation in the province’s grizzly bear recovery strategy — a plan that’s being rewritten this year.

Carrie Sencartier, a spokeswoman for Alberta Environment, said Stenhouse's work is being reviewed by the province.

"This information will be considered as part of the grizzly bear recovery planning process," she said in an emailed statement.

Grizzly bears were listed as threatened in Alberta in 2010 after it was estimated there were only about 700 bears left in the province.

The population numbers, which will also be updated by Stenhouse this year, led to the recovery strategy aimed at reducing conflicts between bears and people, improving knowledge about the animals and decreasing human-caused mortality.

It suggested roads have a direct impact on mortality and outlined recommendations for limiting access.

According to the strategy, only 0.6 kilometres of roadway should be permitted for every square kilometre of high-quality habitat and a threshold of 1.2 kilometres should be set in all remaining grizzly bear range.

It suggests lower densities should reduce rates of human-bear interactions and ultimately reduce human-caused mortality.

Stenhouse said the new research directly shows a road density of 0.85 kilometres per square kilometre directly affects grizzly bears.

"We see a decline in population levels," he said. "So 0.85 kilometres per square kilometres gives a declining grizzly bear population."

Similarly, they found that bears are less likely to den around roads — a finding that suggests building more roads in grizzly bear habitat could also reduce their chance of survival.

Stenhouse said the province's updated strategy will need to continue addressing human-caused mortalities by looking at roads. It will also need to consider the fact that road densities have increased since the initial strategy was released.

"I'd say keep at 0.6 or below," he said. "The lower you can get it, the better for bears at the end of the day. Remember, this isn't just about grizzly bears.

"It's about people using the roads and attitude toward bears and whether they have firearms."

Indeed, dozens of bears continue to die because of humans each year.

A total of 31 grizzly bears died in Alberta in 2013, with at least 26 being killed by poachers, motorists and landowners. It was the highest number of deaths since the province suspended the hunt in 2006.

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