

## Grand Teton Road-Kill FOIA Summary July 2013

Grand Teton National Park in northwestern Wyoming is known worldwide for its wildlife. Unfortunately, this fame has had negative impacts on the wildlife of the park. Wildlife-vehicle collisions (WVCs) constitute a significant source of mortality for wildlife populations in any environment, and Grand Teton is no exception. Park managers have publicly recognized since 2005<sup>1</sup> that road kill is an issue in the park, and have taken measures to address the issue. Starting in 2007, the park began a concerted effort to improve the quality of data they were gathering, and began to implement research based mitigation strategies.

First, Grand Teton has collected road kill data from 1990 to the present. However, they significantly improved their methodology for gathering that data over that time as well, which is reflected in an increase in the number of documented road kills, particularly for smaller animals. It is unlikely, however, that a dead elk or bison on the side of the road would go unmissed, and collisions with larger animals tend to cause more damage, and are thus better reported.

Broadly speaking, Grand Teton has seen an increased number of WVCs over the past two decades, likely due to an increase in visitation over that period. The following graph is from a 2011 WVC brief that PEER obtained in a 2013 FOIA request:

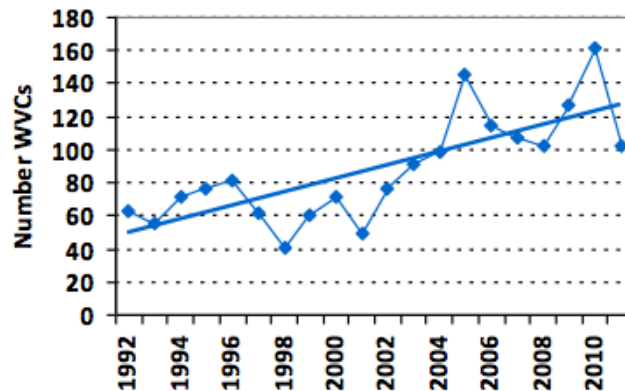


Figure 1. Reported wildlife vehicle collisions and roadkill incidents in Grand Teton National Park, 1991-2011.

Again, while some of this upward trend may be attributable to better data gathering methods, WVCs involving large mammals such as elk and bison have also been increasing.

Overall, 24 different species were documented as victims of road kill in 2011. As is typical, ungulates made up the bulk of those incidents. Large carnivores tend

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<sup>1</sup> I could find no Grand Teton Press releases on the subject of road kill prior to 2005

to be relatively unaffected on Grand Teton's roads compared to Yellowstone to the north, but Grand Teton's carnivore population (especially grizzly bear and wolf) is smaller than Yellowstone's. The first recorded grizzly bear death due to a vehicle impact was in June 2005. Between 1990 and then, Yellowstone had been subject to six.

Grand Teton's push to collect data has resulted in the discovery of some interesting patterns within the park. It was found that a disproportionate number of drivers involved in WVCs were local. Grand Teton also did studies on speed limit obedience within the park, and found that on some roads almost 100% of drivers were exceeding the speed limit, sometimes by more than 10 mph. Grand Teton was also able to break down by species when during the year most collisions were taking place, and when during the day. The results of these studies are outlined in the 2011 brief.

The upshot of all this data collection and analysis is that Grand Teton has been able to apply mitigation measures strategically and always in consideration of the relevant ecological variables. Grand Teton has implemented an impressive array of low-budget, but scientifically justifiable and effective mitigation measures. The most drastic of these was a permanent nighttime speed reduction on highway 89/191/26 to 45mph. Other measures include –

- Widening centerlines to make the road appear narrower (but without the corresponding decrease in visitor safety from actually narrowing roads) and introducing 'visual friction' to slow traffic;
- Installing permanent speed readers and variable message signs along sections of roadways in the park (these dynamic signs have been shown to be more effective than static signs);
- Starting education campaigns in the local communities; and
- Fielding adequate speed patrols to help ensure speed limit compliance.

All of these measures are scientifically sound, well studied, and evidence based. While the number of WVCs in the park has not decreased dramatically over the last few years, there is no reason to believe that these measures are not having an impact. The number of yearly WVCs is influenced by a variety of factors that are beyond human control, so there is ample reason to hope that long term trends will be in wildlife's favor.

If they are not, however, Grand Teton appears to be willing to take stronger measures to reduce the number of WVCs. In a 2011 internal presentation, the park identifies the repositioning of the Moose-Wilson Road away from riparian areas as a long-term goal.

On the whole, Grand Teton is deserving of much credit for their efforts to document and reduce WVCs. They see road kill for what it is—a conservation problem affecting all species, not just federally protected ones. They are actively taking effective measures to reduce WVCs, not simply explaining why such action is unnecessary.