

Response to Harron. 2007. “Assumptive Error and Overestimation of Effects in Wildlife Model Output”

Scenarios are Plausible Stories about the Future, not Forecasts

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Key Words: *Alberta; boreal forest; cumulative industrial impacts; forestry industry; integrated resource management; petroleum industry; simulation model; Western Canadian Sedimentary Basin*

In his critique of our paper, Harron appears to have missed the intent of our work. In the spirit of the Millennium Ecosystem Assessment (<http://www.maweb.org>), our objective was to demonstrate how scenarios could be developed and used to help decision makers consider positive and negative implications of alternative development trajectories. Our scenarios were not intended to be forecasts or predictions, but plausible, challenging, and relevant stories about how the future might unfold given certain management strategies. We purposely parameterized the “business as usual” scenario conservatively so there would be no doubt regarding its plausibility. In the 4 years since the paper was written, the rate of development in the study area has, in fact, been significantly greater than our base case. As for the issue of avoidance of seismic lines by caribou, the avoidance effect is actually apparent up to 250 m (Dyer et al. 2001). For our modeling scenarios, we used 100 m as a reasonable cutoff for meaningful ecological impacts. This reflected the consensus estimate of 20 caribou biologists. Moreover, the projected impacts correlate well with the 50% decline in the local caribou population observed over the past decade (Alberta Woodland Recovery Team (2006), unpublished data). The most important point is that all scenarios considered in our study show striking increases in linear feature densities and any practices that lead to reduction in the size, duration, and intensity of these features will improve conditions for caribou relative to a “business as usual” scenario. This conclusion holds true regardless of the size of the area used to buffer these linear features.

Responses to this article can be read online at:
<http://www.ecologyandsociety.org/vol12/iss1/resp4/responses/>

LITERATURE CITED

Dyer, S. J., J. P. O’Neill, S. M. Wasel, and S. Boutin. 2001. Avoidance of industrial development by woodland caribou. *Journal of Wildlife Management* 65:531–542.

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