

Caribou behaviour and calving success in relation to oil and gas development: are all disturbances created equal?

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GL 15-ERPC-06

We developed a project to investigate the impacts of well sites in all phases of development on caribou habitat selection and reproductive success. We focused on two boreal caribou herds (Chinchaga and Little Smoky) in west-central and north-western Alberta where the anthropogenic disturbance footprint is extensive. We used GPS collar data from caribou, disturbance data from partners in the forestry and oil and gas sectors and the Government of Alberta, and information on well site activity to address the following objectives:

1. Determine how well sites in different stages of development influence the behaviour of caribou, and assess how changes in caribou behaviour vary seasonally and across different regions (west-central Alberta vs. north-western Alberta).

2. Evaluate calving success and habitat selection of caribou during the calving season in relation to the proximity and density of oil and gas developments and other disturbances in boreal caribou herds in west-central and north-western Alberta.
3. Evaluate whether 500m buffers on well sites and pipelines accurately reflect caribou functional habitat when considering information on well site activity and re-vegetation stage of pipelines.
4. Synthesize findings to support decision making with respect to restoration and mitigation of disturbance features within caribou range and contribute to caribou recovery in west-central and north-western Alberta.

Policy Issue

Biodiversity; species conservation, boreal caribou

Knowledge Gap

boreal woodland caribou calving habitat selection (predation risk)

Herds studied: Alberta; *boreal*, Chinchaga, Little Smoky

2015 Report

Best Practice Document