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#### Line-Blocking Experiment in the Little Smoky

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Research collaboration between the Caribou Range Restoration Project (CRR) and University of Alberta has resulted in opportunities to experimentally test hypotheses related to wolf mobility on linear features. A field experiment, using a paired design of 80 sites randomly assigned to treatment (lineblocking) or control, was implemented in high-use areas of the Simonette wolf pack's territory.

To assess the hypothesis that wolves will fully avoid areas where linear features are treated, we are testing the following prediction: based on GPS and remote camera data, wolves will choose to use control areas, similar in habitat type and availability to treatment areas, significantly more than they will use treated areas.

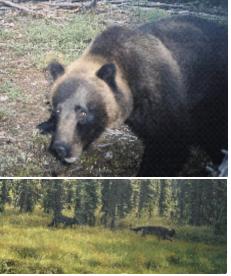
The line-blocking experiment is monitored in two ways: remote camera and wolf GPS collar data. To date, thirty-two remote cameras have monitored a subset of treated (8) and control (8) sites for more than 33,000 hours. Using the response variable rate-of-use, preliminary results from the cameras indicate that there is no significant difference between exterior and interior locations of treatment *or* control sites, for all species.

Thus far, line-blocking by tree-felling does not appear to influence animals' rate of use of linear features, as measured by remote cameras. GPS wolf collar data and analyses forthcoming winter 2004.

#### Acknowledgements

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### **Caribou Updates**

Fall caribou captures were completed at the end of October. The status of collars on each herd is as follows:

#### RedRock Prairie Creek Herd (RPC)

Ten new GPS and 1 VHF collars were deployed on RPC. There are now 12 active GPS collars and 17 VHF collars on the RPC.

#### A la Peche Herd (ALP)

Two GPS collars were recovered and replaced with VHF collars on the A la Peche Herd (ALP). Twenty-one caribou on the ALP carry VHF collars and 3 caribou along Highway 40 carry GPS collars.

Little Smoky (LSM) Caribou and Wolves There are 11 active GPS and 10 VHF collars on the LSM caribou. All of the GPS collars will expire this winter. Two GPS collars were collected in late October.

Five wolf packs in the LSM area carry GPS collars. Two GPS collars were collected from the Simonette Wolf Pack in late October. The remaining GPS collars will be collected this winter.

## Congratulations Kirby!

Kirby Smith successfully defended his Master's thesis titled "Woodland Caribou Demography and Persistence Relative to Landscape Change in West-central Alerta." A PDF of Kirby's thesis will be made available on the WCACSC webpage http://www.rr2.ualberta.ca/research/ caribou/publications.htm

'Research News' is intended to update members of the West-Central Alberta Caribou Standing Committee (WCACSC) about recent highlights of supported research, that are being prepared for final products. All results are preliminary and for information purposes only, and cannot be used without permission by the authors. For enquiries regarding the newsletter, contact Kim Lisgo (editor) at kim.lisgo@ualberta.ca.