Alberta Conservation Association (ACA)

Date: 2014-2015

Project Name: Effect of Industrial Disturbance on Wolverine and Lynx

Wildlife Program Manager: Doug Manzer

Project Leader: Robert Anderson

Primary ACA staff on project:

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Partnerships

- Alberta Environment and Sustainable Resource Development
- Alberta Trappers' Association
- Animal Damage Control – A Division of Bushman Inc.
- ATB Financial
- Bildson Realty Ltd.
- Daishowa-Marubeni International Ltd.
- Hinton Trappers Association
- Richard D. McCabe Professional Corporation
- Rocky Mountain Wilderness Society
- Stojan's Motor Sports
- Trapper Gord Homestead & Survival
- University of Alberta
- Individual donors: P. Bumstead, L. Elias, L. Hommy, R. Kantor, G. Kruger, G. Macmillan, L. Marciak, D. Middleton, S. Otto, A. Pollock, D. Pilon, R. Reed, B. Smith, J. Sorenson, W. Sullivan, N. Tait, D. Ukeniek, S. Wilson and M. Zapach

Key Findings

- To date, 13 female and 16 male wolverines have been involved in the radio collaring study.
- By mid-March 2015, 6 females and 10 males were collecting radio-collar data for a portion of the winter. Four lynx were also collecting data.
- Male wolverines were found to have home ranges of up to 1,200 km^2.
- In addition to feeding on carrion of large ungulates like caribou and moose, wolverines were found to hunt snowshoe hares and beavers.

Introduction

We are partnering with the Alberta Trappers' Association (ATA) to identify where wolverines occur in the province and to determine the major factors influencing their distribution. In 2012, we expanded our partnership to include the University of Alberta and worked with them to bring on a Ph.D. student (Matthew Scrafford) to study the effects of industrial disturbance on wolverines in Alberta's boreal forest. As part of that work, ACA staff have been assisting with efforts to attach radio collars to wolverines and then following them to see what they are eating and where they are denning.

Methods

We provided project support and shared data with Matt's study wherever possible. Matt's field studies began during the winter of 2013/14, and ACA staff have been working closely with him since that time. In 2014/15, we were responsible for assisting with live capture, collaring and recapture of wolverines, including uploading collar data and maintaining live traps throughout the winter near Rainbow Lake. We also helped maintain traffic camera stations and wolverine bait/camera station transects. Once several wolverines had radio collars on them, we visited wolverine locations where data points were clustered to investigate what they had been doing and to look for den sites.

Results

Sixteen wolverines were wearing radio collars for at least a portion of the winter of 2014/15. Following tracks in the snow and visiting clusters of data points revealed that wolverines were not only feeding on the carrion of large ungulates such as caribou and moose, as has been found in other areas, but they were also actively hunting snowshoe hares and beavers (Figures 1 and 2). In several cases, wolverines had cached beaver carcasses earlier in the year and returned in late winter to eat them.

Figure 1. Wolverines will often cache food and return to the site later to eat it. Kyle Prince (Alberta Conservation Association) investigates a site where a wolverine had previously cached a beaver carcass in a willow thicket; radio collar data showed that the wolverine later spent three to four days feeding on it. Photo: Mike Jokinen

Figure 2. Rainbow Lake crews noticed a significant increase in snowshoe hare sign in the winter of 2014/15 compared with the previous year. One female wolverine (F6) spent several days in an area hunting snowshoe hares. Photo: Andy Murphy

Conclusions

The partnership between ACA and the ATA was strengthened by bringing on a student from the University of Alberta to study wolverine ecology at a finer scale. The data collected by trappers at their run poles across the northern half of the province complements this radio collar data and provides a broader geographic context in which to consider the detailed findings from the collared animals. Several trappers have assisted with the radio collaring work by assisting in the field, by providing bait for the live traps, or by contributing funds to help purchase the expensive satellite radio collars.

Communications

- *Alberta Primetime* (CTV) news story: http://alberta.ctvnews.ca/video?clipId=553745

Literature Cited

N/A