Black Bear Monitoring in Southwestern Alberta

**WHO?**
Waterton Biosphere Reserve Association has partnered with Alberta Environment and Parks, Parks Canada, Alberta Parks, and the University of Alberta to initiate a black bear monitoring project in southwestern Alberta.

**WHAT?**
The last black bear population estimate for southwestern Alberta was completed in 1993. Since then, populations have been changing. Based on Fish and Wildlife occurrence records from 1999-2011, sightings have expanded eastward, and have increased in frequency.

Preliminary data from southwestern Alberta Grizzly Bear Monitoring Project has shown that roughly 40% of hairs sampled from rub trees are from black bear.

Through further genetic analysis of black bear samples to the individual level, we are interested in answering the following questions:

- What are current black bear densities and abundances in southwestern AB?
- At a population level, how do grizzly and black bears habitat associations differ? Landowners and residents of southwestern Alberta have indicated they rarely see black bears in areas where grizzly bears are now common.

**WHERE?**
As part of the Crown of the Continent ecosystem, southwestern Alberta represents a critical area for maintaining connectivity to wildlife populations in British Columbia (BC) and Montana. We are using hair samples already collected during the Grizzly Bear Monitoring Project, which extends north to Hwy 3, west to the BC border, south to the U.S. border, and east of Cardston.

This is a project is part of Anne Loosen’s Master’s research at the University of Alberta.
Black bear detections in 2013
232 individuals
(129 males, 103 females)

Black bear detections in 2014
222 individuals
(122 males, 100 females)

In 2013 and 2014 combined, 347 unique black bears were detected at some point in the study area.

Take caution in interpreting this number. It is not a population estimate.

Because we know we did not detect 100% of all bears present in the study area, we will use spatially explicit capture-recapture methods to estimate the number of resident black bears in southwestern Alberta.

PROJECT TIMELINE

2013 – Data collection
2014 – Data collection
2015 – Genetic analysis
2016 – Course work
    Data analysis
2017 – Finalize analyses, distribute results

Complete

Please visit our website http://wp.biology.ualberta.ca/blackbear/