Boreal Caribou: Telemetry Project (Bistcho Lake/Cameron Hill Herds)

GL 902950, Pat Cabezas, Boreal Caribou Committee

The initial objective of this project was to gain a clearer picture of wolf, coyote, and black bear distribution in caribou range. To do this, 120 hair removal sites within six habitat types in, and around, the WSAR range were built in early 2004. Habitats examined included: (1) along rivers and streams (i.e. riparian) in uplands, and (2) peatlands; (3) on seismic lines in uplands, and (4) peatlands; and (5) in core areas (i.e. at least 250 m from the nearest river, stream or seismic line) in uplands, and (6) peatlands.

Hair removal sites consist of a 2 x 2 m perimeter fence of barbed wire running around four trees. Sites were baited twice during 2004, once in mid-winter and once in spring (i.e. caribou calving). Sites were checked two weeks after baiting to remove hair samples and record tracks. Hair samples were collected in order to obtain an estimate of the minimum number of individuals (via DNA analysis) in the WSAR range. The results from winter, 2004, suggest that wolf and coyote activity is high in peatland habitat (Figure 1). Wolf activity in peatland habitat was highest

along rivers, streams, and on seismic lines. Interestingly, however, was the noticeable lack of wolf hits at ‘core’ sites within peatland habitat. Note: wolf and coyote presence was determined by tracks in winter. Similarly, the results from spring showed high levels of predator activity in peatland habitat (Figure 2). Black bear activity was highest in the uplands, though about one third of the sites in peatlands were also visited by black bears. Canid activity appears to be ubiquitous across the WSAR range and adjacent upland habitat. Note: wolves and coyotes are currently combined as ‘canids’ for the spring results. DNA analysis is needed to distinguish between wolf and coyote hair (these results are not yet available): no tracks were available to determine the presence of these two species at sites in spring. Results from this inventory suggest that top predators are using peatland habitat more frequently than anticipated based on previous predator studies in this area. Consequently, the next step in this study is to determine whether predator numbers in the WSAR range have increased since the early- to mid-1990s.

In addition, the aim is to address various questions about how predators function in peatland habitat. Specifically, whether predators are resident in peatland habitat, their pack structure and diet in peatland habitat, and how top predator species interact with each other in peatland habitat. In summary, results have yielded some interesting insights into predator use of a caribou range. Most

notably is the inclusion of a novel predator species into this system (i.e. the coyote), and the extensive distribution of wolves, coyotes, and black bears in peatland habitat. These findings have provided the essential baseline information needed to (1) expand our research of predators in caribou habitat, and (2) to assist with the implementation of predator management strategies associated with caribou recovery plans.