

HAINES JUNCTION LATE WINTER MOOSE HABITAT SURVEY 2009



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2009

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Haines Junction Late Winter Moose Habitat Survey, 2009

Survey dates: March 7-8 and March 21, 2009

Aircraft: 2 days with Bell 206 and 1 day with A-Star, Kluane Helicopters

Pilot: Bill Karman, Kluane Helicopters, Haines Junction

Survey crew: Eric DeLong, Sarah Davidson, Heather Fitzgerald, Kathleen McDade, Shawn Taylor, Lorne LaRocque

Hours flown: 19 hours, approx.

Weather: March 7-8, clear, -9 and windy, March 21 clear -15, N 20-30 kph

Snow: Fresh, ranging from about 60 cms in valley bottom to 110 cms in subalpine. Crust variable; in lower open meadows strong enough to hold person to soft and weak in forest and higher elevations. Tracking conditions were generally good with fresh deep snow.

Survey area: Winter 2008 survey area was repeated. Coverage included 53 ver Hoef sample units (54 if sample unit 212 is included) totaling approximately 894 km². Four sample units were added to observe lower suitability model ratings. Haines Junction was roughly in the middle of the survey area. The survey included the Dezadeash and Kathleen Rivers and sampled valley bottom to subalpine habitats.

Methods: Each sample unit was about 17 km² each. These were flown to ensure that all possible moose habitat in the survey area was consistently searched for moose and moose tracks. GPS was used to record moose locations and to fly consistent flight route patterns. Search intensity was approximately 1 minute per km² which was faster than our post rut surveys (2 min/km²). Moose were classified as adult or calf (young of last year). Tracking of moose was also noted and sampling units (SU) rated as having light, moderate or high amounts of tracking.

Results: Survey sightability was poor in much of moose habitat with many moose bedded in forest. In addition to moose observations, subjective descriptions of moose track relative abundance were very important.

We counted 57 moose, including 13 calves during this survey. Calves accounted for 23% of the total moose counted.

When this survey area was first flown in March 2008, the snowpack was less deep. During that survey we counted a total of 36 moose (plus 3 moose just outside the southeast edge of the study area east of Kathleen Lake). The 2008 survey was flown with two people in a fixed wing aircraft while the 2009 survey used a helicopter with three aboard. Snow conditions in winter 2009 were much deeper than 08 and between 10-30% greater than average (YTG snow survey data) in this part of Kluane Region. In 2009,

riparian habitats along the major drainages had the most moose tracking. In 2008 when snow would not have been a limiting factor these same habitats showed the least use by moose. For example, moose used riparian habitats of the Dezdeash River during 2009 but not during 2008 when snowpack was shallow relative to 2009 (Figure 1). Similar to 2008, in 2009 we found moose scattered at low density throughout the survey area. Mixed type open forest at mid elevations appeared to be attractive to moose during both late winter surveys.

In 2009, extra grids were flown (sample units 107-109, 123) to observe moose and moose sign in areas that were modeled to be of low suitability (draft model – Figure 2). Moose locations were observed in the highest suitability modeled only during 2009 (with deeper snowpacks). In 2009, moose were also observed in some areas that were considered to be relatively low moose suitability. These observations will be used to modify the suitability model.

Figure 2. Locations of 2008 and 2009 moose groups in relation to draft late winter moose habitat suitability model.

