

## **DAILY AND SEASONAL MOVEMENT PATTERNS OF MOUNTAIN GOATS TO A MINERAL LICK IN NORTH-CENTRAL BRITISH COLUMBIA**

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*Abstract:* We monitored mountain goats (*Oreamnos americanus*) along a four km trail to a mineral lick over three years using remote camera systems. The objective of the study was to monitor the behaviours and movement patterns of the mountain goats prior to forest harvesting activities that would be taking place near the trail, and determine if there were any changes to behaviour or movement patterns after forest harvest activities. This report outlines the results of the pre-harvest behaviour and movement patterns. Movements of mountain goats initiated in late May and increased rapidly through early June. By late August the number of movements had decreased significantly, with no movements occurring after mid-October. Single mountain goats accounted for 73% of the photographs from remote camera monitoring, with groups of two animals accounting for 22% of the photographs and groups of three or more animals making up the remaining 5%. The proportions of males and females photographed in the 2001 monitoring year were similar to those found in the 1999 and 2000 monitoring years, with almost three times as many females being photographed as males. A significantly higher proportion of kids were photographed in 2000 (26.1%) than in 1999 (2%) or 2001 (6.6%). Peak movement times varied greatly through the study, with daily movement events occurred more often during the daytime than at night. The post-harvest monitoring is scheduled to commence in the spring of 2004 and will be compared to pre-harvest behaviours and movements to determine any effects of the forest harvesting and roads on movements to the mineral lick.

*Key words:* mountain goat, mineral licks, remote camera monitoring, trail movements, daily and seasonal movement behaviour