

***B.C. Mountain Goat Workshop, Prince George, BC 2005***

**Project Title:** Mountain Goat use of a Canyon at Foxy Creek, British Columbia

**1. Project Leader(s):** Todd Mahon

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**4. Project location:** Foxy Creek canyon south-east of Houston, BC.

Coastal:  Transition:  Interior:

**5. Project timeframe:** Start (month/year): 2000 End (month/year, or ongoing): 2002

**6. Project status:** Data collection  Analysis  Write-up  Publication

**7. Project objectives:** (briefly describe the primary objectives of your project)

The study at Foxy Creek canyon was conducted to determine the population status, the general extent of goat use of forested habitats above the canyon rim, the location and extent of critical winter and other seasonal use habitats and locate any other high use areas including mineral licks and trails.

**8. Project descriptors** (select all that apply):

Research

Habitat Use:

Forestry Interactions:

Management

VHF collars:

Oil & Gas Interactions:

Inventory

GPS collars:

Mineral Exploration:

Predation:

Harvest:

Aerial Disturbance:

Habitat Modeling:

Population Dynamics:

Human Disturbance:

Other:

**8. Project description** (provide a brief description of your project including methods and main findings or results to date):

A combination of airphoto assessments, overview aerial surveys, and reconnaissance level ground surveys along the canyon rim were used to identify key habitat features and the extent of geographic use of the canyon by mountain goats. High and moderate relative use by goats (as indexed by sign) was concentrated in the lower and mid canyon strata, where the amount of escape terrain was greatest. Goats also use two side canyons that join Foxy Canyon from the west. Well-defined trails occurred along the rim (and occasionally out to 50m from the rim) of the lower and mid canyon sections and along the north sides of the 2 side canyons. Several areas where goats were found to be licking mineral soil along the rim of the canyon in the mid and lower sections indicated possible mineral licks.

Sign transects and snow track surveys were used to determine habitat use of the forested areas adjacent to the canyon. Eighty-five percent of all goat sign was located within 80m of the canyon rim and 95% of all sign was observed within 150m of the canyon rim. Relative habitat use was examined for 3 broad habitat classes that occurred along the rim of the canyon: mature forest, clearcut, and 40y burn. Use was lowest in the 40y burn for all types of sign and variable, depending

on the type of sign, between mature forest and clearcuts. During the winter, use was limited to the lower and mid canyon sections and almost all use was below the canyon rim. The few tracks that were observed above the canyon rim were all in mature forest habitat and 80% were within 60m of the canyon rim. Goats were selecting areas with lower snow accumulation, either on the steep slopes of the canyon wall or in the mature forest where the canopy provided snow interception.

Aerial population surveys were conducted in the fall of 1999, 2000 and 2001 to estimate the number of mountain goats within Foxy Canyon. Population estimates ranged between 30-46 animals with no population trend evident over the 3 years surveyed. Juvenile to adult ratios of 0.20-0.27:1 indicates healthy reproduction in the population.

**9. Project documentation** (provide a list of citations for all progress, final, or published reports)

- Mahon, T. 2000. Wildlife habitat assessment report, Foxy Creek canyon, CP 15 blocks 10+11. Unpub. rep. prep. for Canadian Forest Products Ltd. Telkwa, BC.
- Mahon, T and L. Turney. 2002. Canyon-dwelling mountain goats along Foxy Creek: status, habitat use patterns and management recommendations - 2001/2002 final report. Unpub. rep. prep. for Small Business Forest Enterprise Program, Min. of Forest. Telkwa, BC. 32pp.
- Turney, L., T. Mahon, R. Blume and J. Farkvam. 2001. Mountain goat populations, movement patterns and habitat use in forested habitats near Nadina Mountain and Foxy Creek British Columbia - 2000 summary report. Unpub. rep. prep. for Houston Forest Products Ltd, Canadian Forest Products Ltd. and Min. of Env. Lands and Parks. Smithers, BC. 24pp + append.