

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

Project Title: An Inventory of Alpine Mountain Goat Habitat in the Morice Forest District

1. **Project Leader(s):** Laurence Turney, R.P.Bio.
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4. **Project location:** Morice Timber Supply Area (Nadina Forest District)
Coastal: Transition: Interior:
5. **Project timeframe:** Start (month/year): Aug/2002 End (month/year, or ongoing): Mar/2003
6. **Project status:** Data collection Analysis Write-up Publication
7. **Project objectives:** (briefly describe the primary objectives of your project)

The overall goal of this project was to delineate alpine mountain goat habitat in the Morice Forest District, to address habitat requirements for this species in strategic land use zonation and operational forest development planning.

8. Project descriptors (select all that apply):

Research <input type="checkbox"/>	Habitat Use: <input type="checkbox"/>	Forestry Interactions: <input checked="" type="checkbox"/>
Management <input type="checkbox"/>	VHF collars: <input type="checkbox"/>	Oil & Gas Interactions: <input type="checkbox"/>
Inventory <input checked="" type="checkbox"/>	GPS collars: <input type="checkbox"/>	Mineral Exploration: <input type="checkbox"/>
Predation: <input type="checkbox"/>	Harvest: <input type="checkbox"/>	Aerial Disturbance: <input type="checkbox"/>
Habitat Modeling: <input checked="" type="checkbox"/>	Population Dynamics: <input type="checkbox"/>	Human Disturbance: <input type="checkbox"/>

Other:

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

The availability of security habitat, in the form of cliffs, rock outcrops and steep slopes, is an important aspect of mountain goat habitat selection. Alpine areas in the district provide large areas of suitable habitat and are the core locations of mountain goat populations in the district. Work for this project included a review of population inventory data, the delineation of potential alpine habitat through digital orthophoto analysis and the assessment of potential alpine habitat through aerial and ground reconnaissance. A total of 529 potential habitat polygons were delineated in the study area through aerial assessment, ground checks and visual assessments. A total of 118 mountain goats were observed during the assessment, as well as numerous trails and other sign. Approximately 47% of the potential habitat polygons were found to contain evidence of use by mountain goats, although all delineated polygons were considered suitable habitat. This project identified potential habitat at a broad scale, and analysis of aspect, slope and elevation characteristics of the area of potential habitat polygons identified some general trends. Results showed that there was not a significant difference

in aspect distribution of all polygons, but those polygons observed to have use by mountain goats tended to be more north or south facing. More area of polygons tended to be within moderate slope ranges (31 – 50°), rather than having steep slope (>50°). Approximately one third of the total area of all potential habitat polygons is within a 1500 to 2100 m elevation range. The area of polygons containing evidence of use by elevation range appears to be proportional to availability, except for the lowest and highest elevation ranges, which display less observed use by total polygon area than available area in those elevation ranges

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

Turney, L., Blume, R., 2002. An Inventory of Alpine Mountain Goat Habitat in the Morice Forest District. Unpub. rep. prep. for Ministry of Sustainable Resource Management. Smithers, BC. 17pp + append.