

EVOLVING INFERENCES ON HABITAT SELECTION AND USE LEAD TO IMPROVING MANAGEMENT APPLICATIONS FOR MOUNTAIN GOATS IN BRITISH COLUMBIA'S SKEENA RIVER WATERSHED

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Abstract: Understanding how mountain goats (*Oreamnos americanus*) selectively use resources is important for designing wildlife management strategies. The probability that an individual uses a given resource, as characterized by environmental factors, can be quantified in terms of the Resource Selection Probability Function (RSPF). We present analyses of mountain goat habitat use data collected from helicopter survey and GPS telemetry studies over the past decade in northwest British Columbia. The presentation illustrated the evolution of the RSPF to better understand how mountain goats select environmental resources and to geo-reference the locations of mountain goat winter ranges across a broad spectrum of conditions in interior and coastal climates. Results, discussion, and management applications relevant to several forestry and helicopter tourism projects ensued.

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