Habitat supply as a paradigm for effective forest stewardship planning: Mountain goats and mineral licks in north-central British Columbia.

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Can mountain goat habitat supply models be used to integrate sustainable management of mountain goats within forest stewardship planning?

Concerns regarding management of mountain goats (Oreamnos americanus) have been raised as forest development encroaches on low-elevation habitat. Fidelity to specific sites renders goats particularly sensitive to disturbance from, and displacement by, various industrial activities. Forest development has the potential to reduce or eliminate access to low-elevation mineral licks, cause disturbance to goats on their winter range, and create access for hunters to previously un-hunted and vulnerable goat populations.

Through a collaboration amongst industry, government, and First Nations stakeholders, we are developing a mountain goat habitat supply model (HSM) with the intent of: a) providing a useful operational planning tool at the Forest Stewardship Plan level, b) facilitating the direct assessment of forest impacts on goat habitats in relationship to timber values, and c) contributing to the development of adaptive management strategies that can be applied to other geographical areas (regionally and provincially).

Our current work is focused on assessing the effectiveness of Goat HSM as a predictive tool, and evaluating the feasibility and effectiveness of implementing Goat HSM as an operational planning tool in Forest Stewardship Plan submissions.

The results will serve industry planners and government resource managers, and are expected to provide measurable progress toward: a) validation and calibration of the model, b) developing standards for demonstrating due diligence and accountability in Forest Stewardship Plan submissions, and c) developing innovative policies and improved standards for establishing adaptive management strategies that balance timber supply and mountain goat habitat needs. The efforts also serve to provide forecasts of habitat supply useful for evaluating indicators of sustainable management as a basis for forest certification.