

EFFECTS OF HABITAT ON COUGAR PREDATION OF ENDANGERED WOODLAND CARIBOU^{TWS}

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Recovery of the endangered southern Selkirk Mountain's woodland caribou (*Rangifer tarandus*) herd has been limited by high mortality of transplanted caribou. Cougar (*Puma concolor*) predation may be the primary cause of caribou mortality. We hypothesize that new forest management practices—which favor numerous, small clearcuts over fewer, larger cuts—have caused an increase in deer, which has allowed cougars to increase and resulted in more cougar-caribou encounters. Trophy hunting of dominant male cougars may have increased the cougar population also by allowing subdominant males to establish territories and breed. We will assess whether cougar predation is preventing caribou recovery and evaluate whether predator or habitat management could lower caribou mortality enough to achieve a stable caribou population. The transplanted caribou are radio-collared already. Forty cougars (10 in northeastern Washington, 10 in northern Idaho, and 20 in southern British Columbia) will be radio-collared during winter 1998-99. We will track the animals from fixed-wing aircraft for 3 years, with intensive monitoring from May-October when most caribou mortalities occur. We will investigate caribou mortalities to assess the extent of cougar predation, determine whether all cougars or only specific individuals prey on caribou, and evaluate the effect of removing specific cougars. We also will compare habitats used by cougars and caribou to

identify specific habitat features that may increase the vulnerability of caribou to cougar predation. Poster