A review of population-based management of Southern mountain caribou in BC.

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The decline in Mountain caribou in BC over the past decades has resulted in extensive basic and applied research to guide caribou management by understanding the proximate and ultimate causes of the decline. At the top of the list is high predation rates brought about by human alteration of habitat and the subsequent alteration of predator-prey dynamics. We reviewed population-based management experiments undertaken in BC to recover caribou populations. These included primary prey (moose) reduction, lethal predator control, maternal penning, translocations, and supplemental feeding. Moose reduction by liberalized harvests has led to wolf population reduction and stabilization of treated caribou herds. Translocations have had limited success and finding source populations for future attempts will be a challenge. Maternity pens are producing promising results but their efficacy is strongest in relatively small populations and best results appear to occur when combined with predator control in areas surrounding the pens. Predator control experiments have just begun and results are forthcoming. Overall, no single population-based management tool has increased caribou populations. It is recommended that multiple levers need to be applied in combination on an experimental basis going forward.