Habitat Selection and Mortality of Mule Deer in the South Central British Columbia[TWS]

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Several regions of British Columbia (B.C.) have recently experienced seemingly sharp declines in mule deer (*Odocoileus hemionus*) populations. One hypothesis

regarding this decline is that habitat modifications, brought about by resource extraction, have exacerbated predation pressure on mule deer. In response to this the Columbia Basin Fish and Wildlife Compensation Program in conjunction with the B.C. Ministry of Environment Lands and Parks, began radio collaring mule deer in February 1997. Deer in the Salmo-Creston region of south central B.C. were targeted, partially due to their overlap with mountain caribou (*Rangifer tarandus caribou*), another species believed to suffer from high predation pressures. We have radio collared 24 mule deer (22 females, and 2 males), 13 of which remain on the air. Moralities include three cougar predations, one bobcat predation, one unknown predation, one highway mortality, one death of natural causes, and three unknowns. One buck slipped his collar shortly after capture. Radio collaring of additional deer is ongoing. This project will produce basic habitat and population data (i.e. seasonal habitat use, survivorship, and recruitment), as well as an in-depth analysis of mule deer mortality. Analysis of radio telemetry and mortality data will test the hypotheses that: 1) deer use some habitats disproportionately to availability, 2) predation is disproportionately high in specific habitats, and 3) population recruitment is low due to high predation. Determining which forces have the greatest impact on mule deer populations, may allow managers to address the recent decline in deer numbers through better habitat, or predator management. Poster.