

DEMOGRAPHICS, MOVEMENTS, AND POPULATION TRENDS OF GRIZZLY BEARS IN THE CABINET-YAAK AND SELKIRK ECOSYSTEMS OF BRITISH COLUMBIA, IDAHO, MONTANA, AND WASHINGTON^{TWS}

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We investigated demographic values of 22 and 46 radio-collared female grizzly bears (*Ursus arctos*) and attendant offspring in the Cabinet-Yaak and Selkirk ecosystems, respectively. Data was collected from 1983-1998. Four mortalities of radio-collared animals or offspring were detected in the Cabinet-Yaak sample and 11 in the Selkirks. Estimated survival rates were 0.953 ± 0.238 for adult females, 0.913 ± 0.190 for subadult females, 1.0 ± 0.0 for yearlings, and 0.867 ± 0.20 for cubs in the Cabinet-Yaak. Estimated survival rates for the Selkirks were 0.933 ± 0.072 for adult females, 0.856 ± 0.200 for subadult females, 0.641 ± 0.297 for yearlings, and 0.870 ± 0.174 for cubs. We also report and compare trap success, reproductive parameters, causes of mortalities, and sex/age structure from these two areas. We calculated a finite rate of increase (λ) during 1983-1998 for the Cabinet-Yaak and Selkirks. Adult female survival contributed the largest amount to the variance in λ for the Cabinet-Yaak. Subadult female survival contributed the largest amount to the variance in the Selkirks. Data was partitioned to investigate timing and influences of mortalities on population growth. Male grizzly bears from both the Yaak and Selkirks moved into a common area in British Columbia, suggesting possible genetic interchange between recovery zones. We discuss the validity and implications of classification of these two ecosystems as one recovery area.