

## GRIZZLY BEAR POPULATION AUGMENTATION IN THE CABINET MOUNTAINS OF NORTHWEST MONTANA

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The Cabinet Mountains grizzly bear (*Ursus arctos*) population was estimated at 15 or fewer individuals in 1988 and believed to be declining toward extinction. In response to this decline, a test of population augmentation techniques was conducted during 1990-1994 when 4 subadult female grizzly bears were transplanted into the area. Two criteria were identified as measures of success: bears must remain in the target area for one year, and bears should ultimately breed with native male grizzly bears and reproduce. Three of four bears remained in the target area for one year or more. One bear died after one year. Reproductive success of any of the remaining individuals could not be established until 2006 when genetic analysis of hair snag samples collected from 2002-2005 was completed. This analysis indicated that at least one of the transplanted bears remained in the Cabinet Mountains and had reproduced. The detected bear was transplanted in 1993 as a 2-year-old and was identified by a hair snag within 5 mi of the original release site. Genetic analysis indicated she had produced at least 4 offspring and those offspring had also reproduced. This information indicates that the original test of augmentation was successful with at least one of the transplanted individuals. The success of the grizzly bear augmentation test has prompted continuation of this effort. The Northern Continental Divide Ecosystem area of north central Montana has been the source of four additional bears transplanted to the Cabinet Mountains during 2005-2008. Monitoring of these recent transplants is described.