

## SCIENCE DESIGN FOR PROPOSED NORTHERN DIVIDE GRIZZLY BEAR POPULATION ESTIMATE<sup>TWS</sup>

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Baseline information on the status of the grizzly bear (*Ursus arctos horribilis*) population in northwestern Montana is needed to assess management measures designed to recover this threatened population. Planning has begun for a proposed study to estimate population size in the Northern Continental Divide Ecosystem using hair snag stations and DNA identification of individuals. Here we will report on the results of a September 2002 workshop in which a group of experts met to discuss science design issues related to this proposed project. The study area boundary will include most, but not all of the 32,000 km<sup>2</sup> of occupied habitat. Hair snags will be distributed on a 5X5-km grid for a total of almost 1300 snag sites. Sampling will be conducted during each of five 14-day snag sessions. Concurrent with sampling at baited hair snag sites, we will collect hair from unbaited bear rub trees along trails. We will use results from the two types of sampling in a mark-recapture estimate of population size.