

**SPATIAL AND TEMPORAL ANALYSIS OF GRIZZLY BEAR MOVEMENTS IN
RELATION TO MOTORIZED TRAIL USE IN PORTIONS OF THE LEWIS AND
CLARK NATIONAL FOREST: PRELIMINARY ANALYSIS ^{TWS}**

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Understanding the possible impact of motorized ORV use on grizzly bear movements and habitat use would be valuable to land managers as they seek to balance human uses with wildlife needs. To assess this question, I studied grizzly bear movements and quantified recreational use in the Badger-Two Medicine area of the Lewis and Clark National Forest. Grizzly bear locations were collected using GPS collars collecting data at 1-hour intervals from early June to late October of 1999, 2000, and 2001. Detailed temporal and spatial recreation use data on backcountry trails was simultaneously collected in the same area. Preliminary analysis of these data uses motion metrics to attempt to quantify and relate bear movements to motorized recreational use in this area.