

## Replication of a 1970s Study on Domestic Sheep Losses to Predators on Utah's Summer Rangelands

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### **Abstract:**

Lamb losses to predation have historically ranged from 4% to 8% in the western United States but most data are over 30 yr old. We repeated a sheep depredation study conducted from 1972 through 1975 on Cedar Mountain, Utah, to determine how predation rates have changed in the last three decades. Pastures and herd sizes were similar (1 730 lambs) between our study (2006 and 2007) and the prior one. Additionally, 40% of the ranchers in our study also participated in the prior study. During 2006 and 2007, 5.8% of all lambs on Cedar Mountain were lost to all causes compared to 9.5% during the 1970s. Predators were responsible for 87% of all verified lamb losses during our study versus 83% during the 1970s. We estimated that 4.9% of all lambs on Cedar Mountain were killed by predators during our study compared to 7.9% during the 1970s. During our study, coyotes (*Canis latrans* Say) were responsible for 67% of the depredated lambs, cougars (*Felis concolor* Linnaeus) for 31%, and black bears (*Ursus americanus* Pallas) for 2%. During the 1970s, coyotes killed 98% of all depredated lambs, cougars killed 2%, and bears killed 0%. In addition to the increase in cougar kills, the other change on Cedar Mountain since the 1970s is that California condors (*Gymnogyps californianus* Shaw) have begun scavenging lamb carcasses. Our results indicate that increasing populations of cougars, black bears, and condors have complicated the task of protecting lambs from predators.