



BIGHORN CANYON

Bighorn Sheep

RESOURCE BRIEF

Importance

Once widely distributed across the West, bighorn sheep (*Ovis canadensis*) persist chiefly in small, fragmented populations that are at ongoing risk of decline as a result of disease, forest encroachment caused by fire suppression, and disruption of their migratory routes by roads and other human activities. After having been hunted for millennia in Bighorn Canyon, wild sheep were extirpated from the area in the 1800s as a result of Euro-American settlement. Sheep reintroduced outside the park in the 1970s established a herd that favors the steep, rocky terrain near the edge of Bighorn Canyon, but occupy a range that extends west of the park on Bureau of Land Management land and Custer National Forest (Fig. 1). Concerns about the long-term viability of this herd because of its small size have made its management important for Bighorn Canyon National Recreation Area.

Status and Trends in Bighorn Canyon

After reaching a high of 211 in 1993–1994, the reintroduced sheep population declined to approximately 125 in 1995–1996, probably because of an outbreak of pasteurellosis (*Mannheimia haemolytica*). The Bighorn Canyon herd is currently estimated to number 150–200 and it appears to be stable if not increasing in size. Following the recommendations of a U.S. Geological Survey team

that studied the population dynamics and habitat use of 30 collared sheep during 2000–2003, habitat treatments such as burning and clearing of juniper have been carried out to improve otherwise suitable sheep habitat in the park. The remaining collared sheep continued to be monitored weekly.



Discussion

Despite the increase in size during recent years, the Bighorn Canyon herd remains below a threshold of approximately 300 sheep that would significantly improve its long-term prospects in the face of illness, harsh weather, and predation by mountain lions and black bears. In recent years only a few permits to hunt rams in the Bighorn Canyon herd have been issued by Montana Fish, Wildlife and Parks. Bighorn sheep are especially vulnerable to domestic livestock diseases such as pasteurellosis, which causes bronchopneumonia. In 2004 and 2006, the Wyoming Fish and Game Department translocated a total of 40 bighorn sheep to Devil Canyon, about 12 miles (18 km) east of the park, increasing the size of that herd to an estimated 110 sheep. The Devil Canyon herd could eventually interbreed with the sheep in Bighorn Canyon, improving the viability of both herds. Bighorn sheep selected for translocation are tested for disease before being released.

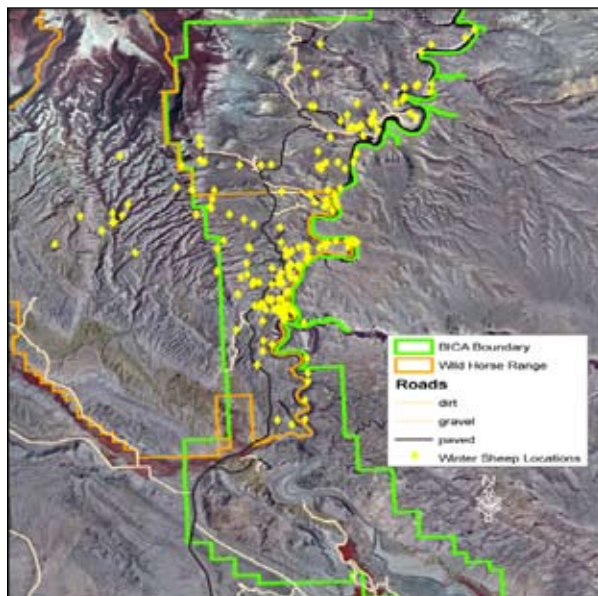


Figure 1. Map of sheep telemetry locations.



Bighorn sheep in Bighorn Canyon National Recreation Area.