The Little Belt Mountains Wild Sheep Restoration Effort

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ABSTRACT: Montana's Bighorn Sheep Conservation Strategy, published in 2010, calls for Montana Fish, Wildlife & Parks (MFWP) to establish "new viable and huntable populations [of bighorn sheep]." While numerous augmentations of existing sheep populations have occurred across the state, no new herds had been established since the Strategy's adoption. Die-offs within other Montana herds and subsequent population declines, coupled with the high resource and economic value of bighorn sheep, have increased the need to establish and promote healthy bighorn populations in Montana. Several habitat models predict suitable bighorn habitat in the Little Belt Mountains, and bighorn sheep were historically present there. During the last decade a few bighorn sheep have naturally returned to the Little Belts, but a viable population has failed to become established on its own. In preparation for a reintroduction effort, MFWP developed partnerships with numerous organizations, local landowners, and the Montana Woolgrower's Association to develop support for this project. In December 2020, 49 bighorn sheep were captured from the Missouri River Breaks sheep herd and released into the Little Belts, and coupled with the Tendoys reintroduction, marked the first wild sheep restoration effort to occur in Montana in over 20 years. This reintroduction was supplemented with an additional 33 bighorn sheep in December 2021. All 82 sheep were fitted with GPS collars to collect locations every 13 hours, while providing mortality notifications as well as a geo-fence to help prevent comingling with domestic sheep. Throughout spring 2021, we conducted extensive monitoring to determine lamb production and survival. Seventy percent of the surviving ewes produced lambs in 2021. To date, 27 ewes have died, mainly due to lion predation. Ewes seem to be more susceptible to mortality during their initial year of release; 6 of the 7 ewe mortalities this winter were from the December 2021 cohort. New RSF habitat models (Lowrey et al. 2021) were highly predictive of actual bighorn sheep habitat selection during both winter and summer. We will continue to monitor bighorn sheep survival, production, and habitat use throughout the coming years and incorporate the Little Belts project into larger statewide research and reintroduction efforts.

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