

****Dispersal Movements and Habitat Selection of Sharp-Tailed Grouse Reintroduced to Western Montana**

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Sharp-tailed grouse (*Tympanuchus phasianellus*) historically occupied intermountain grasslands west of the Continental Divide in Montana but were likely extirpated by the early 2000s. Montana Fish, Wildlife and Parks began reintroducing sharp-tailed grouse to western Montana in fall 2021. We monitored the movements of 94 female sharp-tailed grouse captured in east-central Montana, fitted with GPS transmitters, and translocated to the Blackfoot and Bitterroot Valleys in April – May 2023 and 2024. Of the female grouse released with GPS transmitters, 38% in the Bitterroot and 55% in the Blackfoot eventually settled and established a home range. Dispersal movements differed between the 2 sites: grouse in the Bitterroot traveled an average of 130.5 km over 27 days and settled 29.4 km from the release site, while grouse in the Blackfoot traveled an average of 55.2 km over 16.9 days and settled 12.2 km from the release site. Despite increased lek sizes near some release sites in 2024, dispersal movement patterns did not differ between the 2 years of the study. Dispersing grouse selected areas with intermediate elevations, lower slopes, less tree cover, and more shrub cover. Grouse were more likely to transition from the exploratory to the encamped behavioral state when in an area with high topographic position index and greater perennial grass and forb cover. Most mortalities for translocated grouse occurred during the month following release, when grouse were dispersing, so understanding the factors motivating dispersal movements may aid in the release site selection for ongoing sharp-tailed grouse translocations in western Montana.