
MOOSE MANAGEMENT IN SOUTHWEST MONTANA: INSIGHTS FROM FOUR YEARS OF FIELD RESEARCH

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From 2007-2010, Montana Fish, Wildlife and Parks conducted research on moose ecology on the Mount Haggin Wildlife Management Area in southwestern Montana. In this presentation, we will briefly review our methodology and results, but will largely focus on the management implications of this research and potential ideas for future research. The goals of this research were to determine the habitat selection of cow moose during winter with an emphasis on willow community importance and to examine population-scale willow browse utilization through browse patterns. We also sought to contribute to a foundation for future research on moose in Montana. Using browse surveys on willow (*Salix* spp.) and GPS collars on cow moose, we were able to determine the current intensity of willow browse and basic habitat use of cow moose (e.g. home range size and location), and to model variables associated with both browse utilization and habitat selection. Management implications of the browse surveys include suggestions regarding sample sizes and sample site placement for future monitoring of willow community health or browse utilization. Additionally, species preference by moose has implications for riparian restoration. The habitat selection analysis showed the importance of willow and conifer communities and has implications for habitat conservation and aerial survey methods. Future research on moose ecology in Montana should focus on the impact of changing habitat and climate on habitat selection and population dynamics, the role of predation on populations of moose, and improving aerial or other survey techniques to more accurately monitor moose population trends.