

APPROPRIATE MANAGEMENT LEVELS FOR WILD HORSES: SETTING SCIENCE-BASED LIMITED IN THE PRYOR MOUNTAINS, MT^{TWS}

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The Bureau of Land Management (BLM) responds to regulations whereby it manages wild horses on public lands as self-sustaining, healthy populations in balance with other uses and the productive capacity of their environment. By definition, this requires BLM to manage herds for long-term successful production of viable offspring, but not to the detriment of supporting rangeland. The BLM must also consider terminology such as “Appropriate Management Level” (AML) for herd size, and “Thriving Natural Ecological Balance” (TNEB) for the supporting system in order to evaluate management options. Vagueness in interpretation and changing definitions over the years have contributed to confusion on the part of both BLM managers and public alike. This paper reports efforts from the Pryor Mountain Wild Horse Range, Montana, to consider AML as a range with both a scientific-established minimum and maximum threshold size. Eight years of cooperative agency and university-supported research generated these results. Genetic studies of the herd are used to set a minimum population size beneath which limited animal numbers might be detrimental to long-term herd genetic viability. Spatial Ecosystem Modeling is used to set an upper threshold size beyond which population numbers might have a detrimental impact on the health of multiple ecosystem components.