

## HABITAT PREFERENCE OF CATTLE GRAZING PIÑON-JUNIPER GRASSLANDS IN CENTRAL NEW MEXICO

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Little work has been done on grazing behavior and utilization patterns of cattle grazing grassland interspersed with varying densities piñon-juniper woodlands. Therefore, behavioral data were collected on yearling heifers in replicated pastures consisting of open grassland to dense piñon-juniper, at the Corona Research Center. Data were collected weekly during daylight hours. Observations were taken at four minute intervals and included: grazing, rest, ruminating, travel time, and time at water. Density of piñon-juniper was recorded for all observations and forage species selection was recorded. Night grazing/movement observations were taken once monthly. Observations suggest cattle spend the majority of the daylight hours in sparse and open piñon-juniper ( $\approx 60\%$ ) compared to

grassland and dense piñon-juniper ( $\approx 40\%$ ). Night observations showed little grazing activity with grasslands preferred over piñon-juniper. Amount of piñon-juniper did not appear to effect peak grazing times, which occurred during traditional morning and late afternoon hours. Species diversity was greatest in the sparse and open piñon-juniper areas. Species selection by cattle differed throughout vegetational categories. Blue grama was the dominant species selected across all vegetation types. Wolftail was secondary for grasslands, and dropseeds secondary for piñon-juniper. The presence of piñon-juniper may play a major role in cattle grazing behavior, suggesting a positive value to sparse and open piñon-juniper.