File: exclosure\_density.xls

Exclosure\_density.xls refers to long-term plant density measurements on transects corresponding to selected existing livestock exclosures on the Santa Rita Experimental Range. This file includes all measures of density made on these transects since they were established in 2011 through 2023.

Perennial grass and shrub density were measured every three years beginning in 2011. Density was recorded as the number of plants per 100 square ft.

The file provides a single total density value for measurement years for each species. “UNDER” indicates the number of perennial grass or shrub plants found under mesquite canopy; ”OPEN” indicates the number of plants found outside mesquite canopy; and “TOTAL” indicates the total number of plants found.

Measurements were taken on permanent 1x100-ft. belt transects corresponding to 22 livestock exclosures. Ecological site mapping within each fenced exclosure area determined the location for the transects. For each ecological site represented within an exclosure, four transects were established: two within the exclosure and two just outside of the exclosure on the same ecological site. Only one exclosure (1A) contained more than one ecological site distinction, for a total of 6 transects on 3 different ecological sites.

Transects that are within the exclosures are labeled numerically and with the letter “U” to indicate that the vegetation along the transect has been “Ungrazed” by livestock since the exclosure was established. Transects located outside of the exclosure are labeled numerically and with the letter “G” to indicate that the vegetation along the transect has been “Grazed” by livestock. Transects for each exclosure are therefore labeled G1, G2, U1, and U2.

Taxa were recorded separately to the species level in most cases and sometimes to the genus level only. The codes OTHERG and OTHSHRUB refer to unidentified perennial grass and shrub species. In this file, ARIS refers to all perennial Aristida spp. As for the species Bouteloua chondrosioides (BOCH), Bouteloua hirsuta (BOHI), and Bouteloua repens (BOFI), use caution in using the data due to the possible misidentification of those species at their vegetative stage. It may be wise to lump these species together for analysis.

Sources of vegetation data were the original field data sheets.

exclosure\_density\_notes.txt

8 January 2024