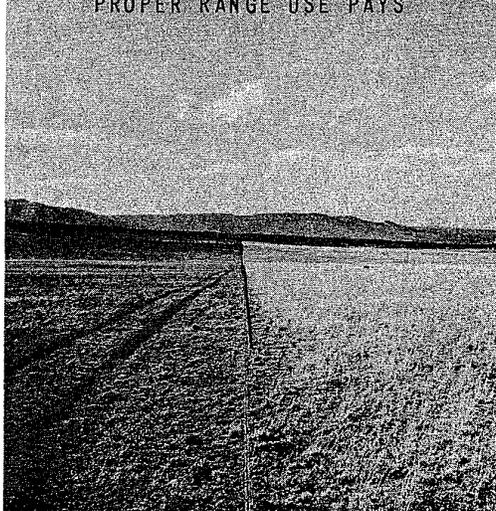


RANGE CONSERVATION - TECHNICAL NOTES

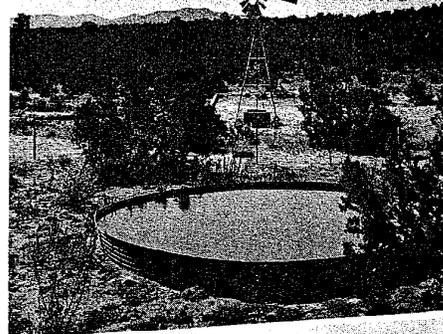
AERIAL CHEMICAL PLANT CONTROL



PROPER RANGE USE PAYS



GOOD LIVESTOCK WATERING



CHAINING PINON JUNIPER



CHOLLA CONTROL



U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
NEW MEXICO

RANGE TECHNICAL NOTE NO. 40

June 15, 1970

SUBJECT: RANGE - PRACTICES - DETERMINING UTILIZATION

Section 5.114, National Handbook for Range and Related Grazing Lands, describes methods for determining utilization by key species. One of these is the percent grazed versus ungrazed plants method. This method is described as applicable where local evaluations have been made relating the percent of grazed versus ungrazed plants of a species to percent removal by weight.

For a number of years Santa Rita Experimental Range scientists in Arizona have worked with this method on their semi-desert mixed grass-shrub rangelands. Principal forage grasses there include bush muhly, Arizona cottontop, dropseeds, black, hairy, and sideoats grama, and threeawns. The chart on this page was developed for this kind of range and would have application on similar kinds of range in New Mexico. New Mexico rangelands most like the Santa Rita Experimental Range occur in the SD-1, SD-2, SD-3 and WP-3 sub-resource areas. Its use outside these areas would be less dependable.

AC

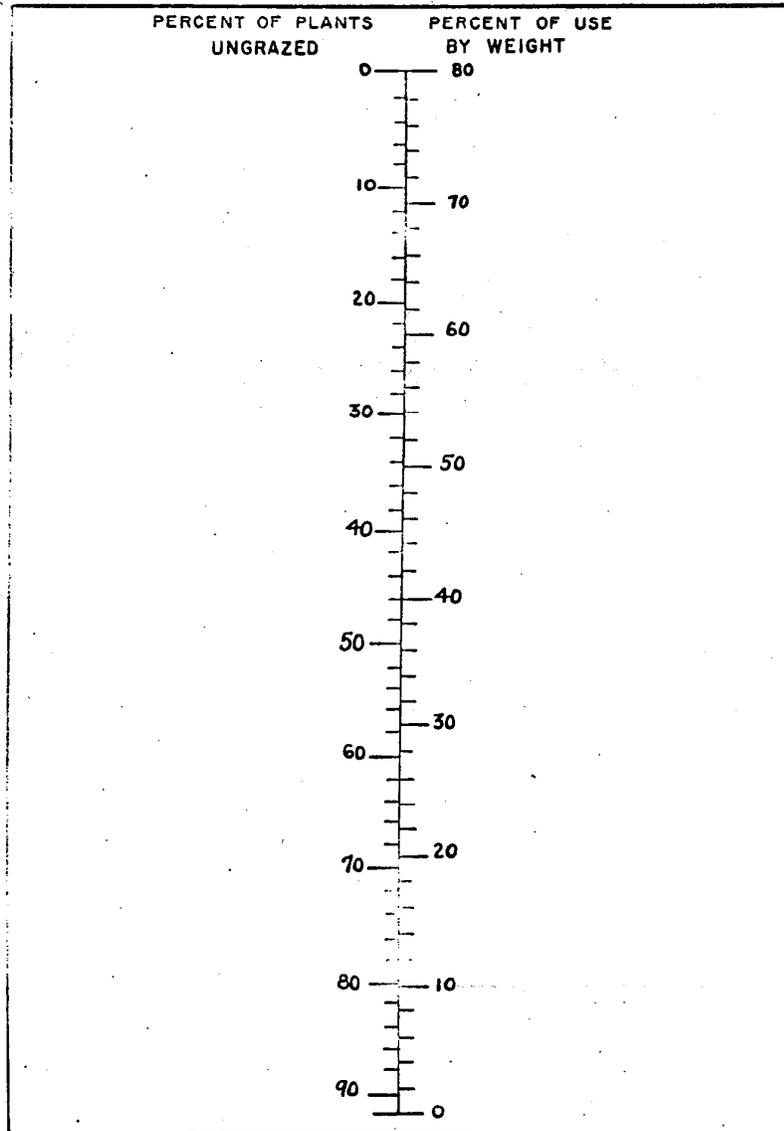
DC

Area Range Conservationists

Regional Range Conservationist, WRTSC

Adjoining States - Arizona, Colorado, Oklahoma, Texas, Utah

SRC - 7



In using this procedure the key species are examined in the key grazing area in each pasture. Key plants to be examined are selected by pacing in a predetermined course. The key plant nearest the right foot (or left, if you prefer) at the end of each pace is recorded as grazed or ungrazed. Percentages of grazed and ungrazed plants are determined directly when 100 plants are recorded. By reference to the chart percentage of utilization by weight for the sample can be determined. For example, if the sample showed 50 percent of the plants to be ungrazed, the chart shows that 36 percent of the current year's growth by weight was removed. Thus the degree of use of the key species would be 36 percent.

References

1. Reynolds, Hudson G. and Martin, S. Clark..1968. Managing Grass-Shrub Cattle Ranges in the Southwest. Agriculture Handbook No. 162, USDA, Forest Service.
2. Roach, Mack E. 1950. Estimating Perennial Grass Utilization on Semi-desert Cattle Ranges by Percentage of Ungrazed Plants. J. Range Management 3: 182-185 illus.
3. Soil Conservation Service. 1967. National Handbook for Range and Related Grazing Lands.