

GRAZING DISTRIBUTION FACTORS

Proper grazing distribution is a factor, which can increase livestock production on rangeland. Grazing distribution refers to dispersing grazing animals over a management unit.

Ideal grazing distribution of livestock occurs when proper utilization extends uniformly over the entire pasture. Cattle are creatures of habit and when left alone their grazing habits are often contrary to the concept of uniform grazing distribution. Consequently, grazing animals must be forced or enticed to seldom-grazed areas. Improved grazing distribution results in higher harvest efficiency because livestock consume a greater proportion of the available forage.

A few techniques available for improving livestock distribution is to manipulate livestock requirements to entice animals to lightly grazed areas. Water development is probably the most important single factor to entice greater grazing distribution. Water requirements of grazing animals must be considered when planning water development. Water needs vary with species and class of animal, nature of forage and weather conditions. On hot summer days, water availability should be as much as 18 to 20 gallons for a cow-calf pair and 1.5 gallons for an ewe-lamb pair. Under cooler conditions, water consumption for mature cattle and sheep will be 8-10 gallons and less than 1 gallon, respectively. Forage utilization decreases rapidly as the distance of water increases, even in level pastures. Animals will overuse sites near water locations rather than walk greater distances to abundant forage. Proper placement of water developments can be determined by observing livestock grazing behavior. Water development of 1 mile on level terrain to 1/4 to 1/2 mile on steep terrain is a good rule.

Salt and Mineral placed away from water site can be used to distribute grazing more uniformly. Livestock should be shown where the salt is located the first time. Salting locations should be more than 1/4 mile from the water to be a useful tool in livestock distribution and several scattered locations can be used in one pasture. Salt placement is

potentially the most economical grazing distribution practice that can be used.

Grazing management strategies that influence livestock distribution are rotational grazing, stocking density and season of grazing. Rotational grazing involves moving livestock through two or more pastures with each pasture grazed one more time during the growing season. Subdividing original pastures to change from continuous grazing to create a new set of pastures can be used to develop a new rotational grazing system to improve range condition of existing pastures. Stocking density (i.e., number of animal per unit area at any point in time) is increased when rotational grazing replaces continuous grazing. As stocking density increases livestock are no longer spread over a large pasture but consolidated into smaller pastures, therefore forage is rapidly removed to increase harvest efficiency because of competition for limited forage. Plants that may have not been eaten are more likely to be eaten. Livestock consume a greater portion of the forage and less is lost to such things as trampling, spoilage by animal wastes and plant maturation.

Time of season a pasture is grazed can affect livestock grazing distribution, as plant community may differ as a cool season or warm season grasses and the change in animal requirements change through out the year. Many plants that are unpalatable at maturity are very palatable at immature stages of plant growth. Pastures dominated by plants with seasonal shifts in palatability should be grazed for optimal forage production.

Improved grazing distribution can increase harvest efficiency and grazing capacity by 10 percent or more if initial stocking rates are proper. The amount of money that can be expended for range improvement to achieve better livestock distribution will depend upon the potential increased livestock production resulting from the more efficient utilization of forage resource. Finally, proper livestock distribution may also result in improved range condition and contribute to increased productivity of overall forage range resource.