Livestock Distribution

What
One of the objectives of a grassland management program is to force livestock to uniformly graze the vegetation in an entire pasture. Livestock prefer to graze the flattest areas of a pasture and areas close to water. Unless forced to do otherwise, they will continue to graze the preferred areas. Such grazing patterns result in portions of pastures being overgrazed and portions being lightly grazed.

Why
When cattle are evenly distributed within a pasture, more of the available plants in a pasture are grazed and overgrazing of the easily accessible plants is reduced. Even distribution results in a larger amount of a pasture receiving proper grazing, which may reduce the necessity of supplemental feeding. A grazier must look at each pasture to ensure that the animals are grazing most of the plants. When livestock are allowed to follow their natural habits, the forage yield in some areas will continue to decrease because of overgrazing, and useable forage on the less accessible areas will be wasted.

Distribution Factors
Several factors influence the way livestock graze a pasture:

Water Location. Generally, cattle drink water at least once a day. They may drink more often, depending on the temperature and availability. Therefore, where water supplies are located within a pasture has a significant effect on grazing patterns.

Natural barriers. Steep slopes or cliff faces, large gullies and rock outcrop influence the movement of livestock.

Slope. Animals have trouble walking and grazing on steep slopes. Therefore, they tend to avoid such areas.

Prevailing wind direction. Animals do not like to graze into a strong wind but choose to graze into gentle winds. Therefore, wind direction and intensity have an effect on grazing distribution.

Shaded or protected areas. Animals seek shelter from cold, heat, and strong winds. Pasture areas that provide shelter with plant cover are used more during temperature extremes and when the wind is strong.

Exposure. West-facing and south-facing slopes are warmer and may be used more on cooler days or in the winter. East-facing and north-facing slopes are cooler and may be used more on warmer days.

Season of use. Some pasture areas are attractive to livestock because of their vegetation. Animals seek the most palatable plants growing at the time. For example, they are attracted to cool-season growing plants during the winter and spring. The location of different plants within a pasture and the time of year often influence grazing patterns.
Ways to Control Distribution
After a pasture is analyzed, there are several methods to consider when attempting to change the animals’ grazing habits. They include:

Grazing Systems. “Rotation Grazing Systems” are discussed in another fact sheet. However, remember that every grazing system has an effect on livestock distribution. Concentrating livestock into as few herds as possible and assigning each herd to a planned grazing system with two or more pastures tends to improve grazing for each pasture.

Water Development. In large pastures where areas are too far from water, the development of a new water supply may improve grazing patterns.

Fencing. With the development of lower-cost fencing, new fences to control animal movement is practical. Small pastures generally improve distribution. Separating rugged terrain and gentle terrain will improve use on the steeper pastures.

Trails. Where natural barriers occur, the construction of trails or walkways can open up new areas of pasture grazing.

Salt or Feed Location. Moving the location of salt or feed bunks may cause animals to increase grazing on lightly-used areas of a pasture.

Animal Herding. Drifting or herding animals from heavily-used to lightly-used pasture areas will redistribute the grazing pressure.

Brush Management. When controlling trees or large shrubs, keep clusters of them to provide necessary shelter if desired. Shelter will draw the stock when needed and encourage grazing in nearby open areas. However, livestock often avoid areas with thick brush, opting to graze in open prairie areas. Therefore, plan and evaluate the effects of brushy areas on livestock grazing.

Shelter may also concentrate livestock numbers during times of extreme temperatures.

Other practices also may influence livestock distribution. Keep in mind that anything you do in a pasture will have an impact. The results should be analyzed before you apply any practice to ensure a positive effect on grazing and will result in more plant and animal production.

Where to Get Help
For more information about hay and pasture management, contact your local office of the USDA Natural Resources Conservation Service, listed in the telephone directory under “U.S. Government,” or the University of Illinois Extension.