

UNDERSTANDING GRASS GROWTH: THE KEY TO PROFITABLE LIVESTOCK PRODUCTION

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ll successful manufacturing enterprises are based on the economic conversion of raw materials into a salable product. The “cost” of the raw material has a direct effect on the profitability of the business. Management is one of the key factors determining the “cost” of the production and utilization of any raw material. In the livestock business, green plants are the raw material and livestock products are the salable commodities. Grazing management is the means by which the producer supervises the “cost” of producing and using the raw material.

Animals graze anytime forage is available. Therefore, there is no such thing as “no” grazing management. Grazing is either done by design when controlled by a knowledgeable manager or by default when animals are allowed to graze without regard for plant and animal requirements.

Optimum grazing efficiency of perennial forage crops requires in-depth knowledge of how plants and animals interact. The plant-animal interaction is complex and must be studied to achieve a complete understanding. Producers must appreciate and more importantly, recognize that certain grazing practices cause a dynamic change in the plant composition of a pasture. The change in plant composition will affect the performance of the animals and ultimately alter the productivity and profitability of the entire enterprise.

REMEMBER. When grazing animals are forced to consume a forage of low quality or plants that are not palatable, their intake declines causing reduced performance. Repeated uncontrolled grazing will result in selective consumption of highly nutritious and palatable plants. The desirable plants will disappear from the pasture while the undesirable plants increase.

Grazing management must be designed with both plant growth and animal performance in mind. Maintaining a *balance* between plant and animal requirements is difficult, but necessary. Generally, the plant is favored when harvested at maturity. However, at maturity, the forage quality is low and animal performance suffers. If a plant is harvested when there is active growth (high in quality), animal performance will be optimum. The *challenge* for the producer is to achieve an *OPTIMUM BALANCE* between plant and animal requirements.

Genetically superior animals will not achieve their genetic potential without proper nutrition. Summer grazing is the nutrition program for the cow/calf and stocker animal and provides the “least-cost” source of gain in the beef industry. Formulating and monitoring grazing programs is as important to the livestock producer as selecting proper rations is to the feedlot operator.

Grazing is a complex interaction between plant and animal. Understanding the needs of both the plant and the animal are necessary for increased efficiency and profit. The economic return of a grazing program depends on forage quantity, quality and harvest efficiency (*Fig. 1*).



Properly managed perennial grasses conserve our valuable top soil resource and allow ruminant animals to convert otherwise useless roughage into food and fiber.

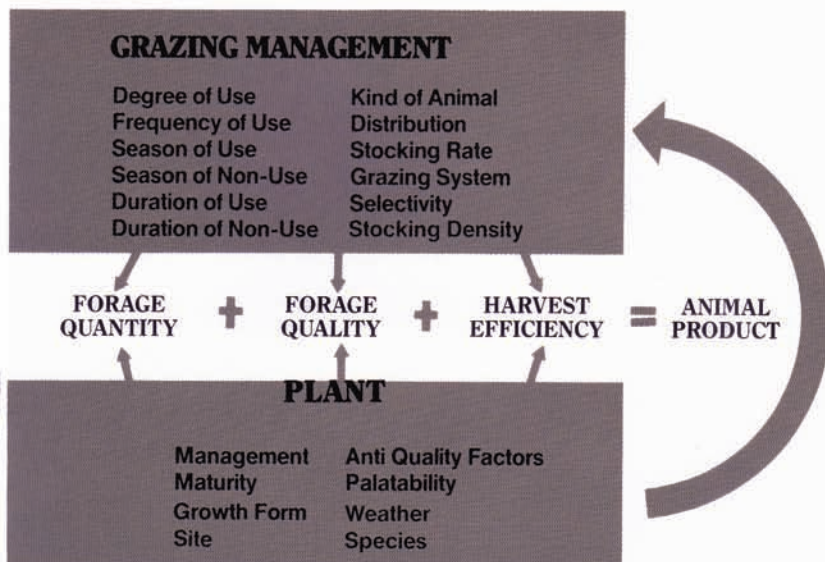


FIG. 1 Factors influencing forage quantity, quality and harvest efficiency.