Conservation Practices that Save: Prescribed Grazing Systems

For producers who manage cattle operations, prescribed grazing systems offer an effective way to reduce energy use, decrease costs, and improve animal health and productivity. Well-managed grazing systems improve the health and vigor of plants, enhance the quality and quantity of water, and reduce accelerated soil erosion and improve soil condition on the land.

Prescribed grazing allows producers to alternate between resting and grazing two or more grazing units in a planned sequence that takes several factors into consideration, including the rate of plant growth, level of vegetative cover, needs of the grazing animal, and other environmental inputs. The availability of water throughout the grazing areas is also important because it minimizes concentrated areas of livestock and enhances nutrient distribution.

It takes 40 pounds of nitrogen and about 1.35 gallons of diesel fuel to raise, harvest, store, and feed a ton of grass hay. At today's costs of $0.40 per pound of nitrogen and $2.41 per gallon of fuel, there are direct energy savings of $10.70 per month per cow for each month cows remain on pasture. Most cost savings arise from using less fuel to harvest hay, store it, and transport it to feeding locations. In dairy operations, leaving cows on pasture also reduces the need for electricity to moderate the climate of freestall barns, and decreases labor costs associated with feeding cattle in confinement and associated manure handling, storage, and spreading.

Grazing management helps reduce energy related inputs by farmers and ranchers.

In addition to energy savings, prescribed grazing has been shown to improve the profitability of cattle operations. In Missouri, beef cattle raised and finished on high quality pasture that is thick and lush have been shown to have a rapid average daily gain of two or more pounds and reach a marketable weight within just 20 months at a cost of $27 per hundred-weight of gain, versus $60 in confinement. By applying grazing management, dairies in New York and Wisconsin found that pastured lactating dairy cows consistently show a higher net farm income from operations over a 4-year period when compared to confined cows, whether measured per cow or per hundred-weight of milk.

There are 634 million acres of non-Federal grazing lands in the United States. Making prescribed grazing part of a resource management system also benefits the overall health of the environment by:

- Minimizing soil compaction due to trampling and enhancing soil quality;
- Providing vegetative cover to help reduce soil erosion and sediment runoff;
- Enhancing wildlife habitat;
- Improving water yield and quality; and
- Sequestering atmospheric carbon in the soil.

NRCS supports conservation practices that save producers money and improve the environmental health of the Nation. For more information on energy-saving conservation practices, visit the NRCS "Save ENERGY, Save MONEY" Web site at www.nrcs.usda.gov.

USDA is an equal opportunity provider and employer.
April 2006