

Master Grazer Program Logic Model

Input

- Extension Specialists
- Master Grazer Coordinator/Extension Associate:
- NRCS Personnel:
 Sid Brantley, Ken Johnson
- County Extension Agents
- Materials: Materials developed for Master Grazer Educational program, related Extension publications
- Funding: KY Ag Development Bd.
- Producer fees, local funds to support travel and involvement by agents and producers.
- Local cooperators to illustrate concepts, to provide access to their farm for tours, and to act as cooperators for Demonstration Farms.

Output

Activities

Years 1 & 2:

- 6 three-hour sessions
- Plants (2 sessions)
 - Animal factors (2 sessions)
 - Water, fencing and layout
 - Farm visit to illustrate concepts taught in above sessions

Years 3 and 4

- 7 three-hour sessions
- Plants (2 sessions)
 - Animal factors (2 sessions)
 - Water and fencing
 - Farm Layout (2 sessions)

Years 3 and 4: Field days and farm tours associated with the Master Grazer Demonstration Farms Sessions taught by specialists and associates at UK and NRCS and county agents.

Participation

Beef, dairy, and goat producers are able to attend multi-county sessions

Outcomes – Impact

Short Term

Graduates will have the knowledge and skills to evaluate their operations and decide how they would like to improve their forage grazing systems relative to the five areas identified as:

- Rotational grazing and stockpiling of forages
- Water quality and water systems in each paddock
- Temporary electric fence to increase efficiency of forage resources
- Pasture renovation with legumes to improve quality
- Improved management practices, i.e. feed better mineral, control parasites, forage variety selection, weed control.

Medium Term

Beef, dairy, and goat producers will evaluate their operations and adopt practices to improve the utilization of their forage resources:

- Implement or improve rotational grazing practices
- Extend grazing season (i.e. stockpiling, warm season grasses, etc) thereby decreasing the amount of hay fed.
- Provide water in each grazing paddock
- Increase the number of paddocks.
- Renovate pastures with legumes
- Improve management practices of animal grazing, i.e. feed better quality mineral, control parasites,
- Use of improved forage varieties
- Apply lime and fertilizer according to soil test.

Long Term

The improvement by beef, dairy, and goat producers of their forage resources will lead to more sustainable (and profitable) livestock operations

These changes will result in one or more of the following :

- Increases in the number of grazing days and/or decreases in total feed cost
- Increases in stocking rates or number of cattle carried
- Improvements in animal performance

ASSUMPTIONS

- 1) The program will attract an audience wanting to improve their grazing operation.
- 2) Producers will be willing to invest in this program as well as the practices required to show positive results.
- 3) Producers will be available and invest the time to travel to multi-county, multi-session training events.

EXTERNAL FACTORS

- 1) Costs associated with adoption of management practices.
- 2) Livestock prices and their effects on profitability will impact available funding to support adoption of practices.
- 3) Weather and its influence on ability to implement practices as well its influence on results of adoption of practices.

SITUATION: Kentucky's forage base is underutilized especially as it relates to the 7 million acres of pasture or lands grazed by livestock. More efficient utilization of this valuable resource can improve the economics of Kentucky livestock agricultural industries. The comparison has been made that Kentucky farmers are only utilizing about one-third of the forages they are producing. In addition, much of what animals consume is lower in quality than needed to support realistic performance expectations.

According to the 2005-2006 Kentucky Agricultural Statistics, Kentucky has over 2.51 million head of grazing ruminants consisting of beef and dairy cattle, goats and sheep. The beef and dairy industries represented over **\$779 million dollars of cash receipts** in 2005 (last year data is available). Improvements in grazing practices will increase the net profitability of Kentucky farms. Improving forage utilization on grazed lands will increase animal carrying capacity and result in the potential for the pasture land base to support more revenue generating animals. **Increasing the utilization rate by 15%** (currently estimated at 35%) could potentially allow Kentucky's pastures to carry an additional 500,000 cattle and result in **\$290 million more gross revenue** from the sale of cattle and milk.