

Program: Beef Logic Model

Situation:

There are approximately 40,000 beef cattle producers in Kentucky and over one million head of beef cows. Kentucky is the eighth largest beef state in the U.S. and has the largest herd east of the Mississippi River; Kentucky ranks third for beef cattle density (cows per square mile) in the US. Cash receipts for beef cattle in Kentucky are approaching a billion dollars. Regardless of cattle prices, it is important to educate beef producers on best management practices to: keep costs down, optimize income through management and marketing, be good stewards of the land, reduce antibiotic use, and practice good animal welfare. These educational programs are targeted to assist our local Agriculture and Natural Resource agents to provide Kentucky beef producers with the tools necessary to be profitable and sustainable

ASSUMPTIONS:

EXTERNAL:

Inputs

Outputs
Activities *Participation*

Outcomes
Short *Medium* *Long*

- UK Extension Specialists
- County Agents
- UK Resources
- Ky Beef Network
- Ky Dept. of Agriculture
- Ky Cattlemen's Association
- Ky Veterinary Medical Association
- Ky Governor's Office of Ag Policy



- Master Cattleman
- Cow College
- Applied Master Cattleman Program
- Master Grazer Program
- Master Stocker Program
- UK Master Marketer Program
- Ky Heifer Development Program
- Beef Cattle Genetics Improvement Program
- Beef Quality and Care Assurance (BQCA)
- Certified Preconditioned for Health (CPH-45)
- Postweaning Value Added Program (PVAP)
- Bull Value Assessment Program (BVAP)

- Cattle producers/ranchers
- Forage Producers
- Master Cattleman
- Industry Representative
- Extension Agents and Associates
- Stockyard Operators
- Veterinarians



- Increase knowledge of:
- general herd management
 - health disorders and classifying disease risk
 - the effects of livestock and environmental interaction
 - genetics
 - reproduction
 - end product
 - budgeting, record keeping, marketing strategies
 - economic risk management strategies
 - animal handling and welfare
 - forage production, growth curves of grasses, factors that impact nutrient quality
 - managed grazing concepts
 - body condition scoring
 - nutrient needs of cattle at various ages and stages of production
 - feeding value of various feedstuffs & forage, how to read a feed tag
 - knowledgeable on the Veterinary Feed Directive
 - Fundamentals of disease prevention
 - Vaccination protocols
 - Early recognition of calving problems and corrective measures
 - Evaluation of production and soundness for culling decisions
 - Understand basic types of dystocia and how to manage them

- Develop a nutrient management plan
- Implement practices to control the breeding season and enhance production efficiency
- Implement a managed grazing system
- Soil test
- Renovate pastures by interseeding clover/legumes
- Use alternative forage species (annuals, warm-season perennial)
- Stockpile tall fescue for grazing
- Utilize body condition scoring to manage nutrition of animals
- Test forage for nutritional quality
- Develop a strategic supplement program
- Utilize a complete mineral supplement program
- Properly use medicated feed
- Implement crossbreeding program
- Make EPD and selection decisions
- Implement practices to perform examinations of pelvic areas, reproductive tract scores, AI, pregnancy diagnosis, and/or animal evaluation
- Develop vaccination and/or antibiotic protocols, as appropriate
- Develop internal/external parasite control strategy
- Use diagnostic lab, as needed
- Properly treat disorders

- Improved farm economic status
- Sustainability of farm
- Long term viability
- Producers save money
- Reduced Expenses
- Enhanced profit margin
- Reduced environmental impact
- Expansion of operation
- Greater enjoyment from farming
- Sustainability of ranch/herd
- Producers save money by making better selection decisions
- Properly match genetics to management and environment
- Improve herd quality
- Increased profits of calves
- Increased days of grazing
- Decreased feed costs
- Incorporate multiple strategies when pricing cattle or dealing directly with buyers outside the mainstream market.
- Evaluate profitability of multiple programs concerning feeder cattle type, gender, and weight, when making purchasing decisions.
- Utilize the futures and options market to limit downside market risk.
- Improved public animal handling image
- Improved animal welfare, healthier herd
- Reduce antibiotic use
- Improved marketing opportunities

- **Intermediate (continued)**

- Change vaccination and/or antibiotic protocols, as appropriate
 - Alter deworming strategy
 - Use UK diagnostic lab, as needed
 - Use UK Veterinary Diagnostic Lab correctly and as needed
 - Properly recognize disease and the need for treatment
 - Develop a relationship with veterinarian
 - Recognition and avoidance of potential toxicities
 - Recognition of calving difficulties and when to intervene
 - Properly treat disorders
 - Buy stockers wisely
 - Utilize enterprise budget (UK Stocker/ Background Sheet)
 - Consider LRP, futures or options to limit risk (call agent, broker or specialist, as needed)
 - Utilize a risk management tool
 - Calculate the value of gain/cost of gains and make buying/selling decisions
 - Discuss animal welfare issues less defensively with others
 - Change ranch management processes to better fit marketing strategies
 - Change marketing methods (CPH, Direct off the farm, Internet, video, etc.)
 - Participate in KBN marketing programs (CPH, MAG 60)
 - Receive KY AG Market News
 - Utilize knowledge to become competitive in the market.
 - Incorporate breakeven analysis when purchasing/selling cattle.
 - Use the feeder cattle futures and options market to make price predictions and predict market direction.
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- Create improved livestock handling equipment/facilities
 - Inspect trailer and load the correct number of cattle in the trailer
 - Alter the type/quality of cattle purchased for herd
 - Utilize basic principles of dystocia and manage to avoid it
 - Use proper cattle handling and movement techniques
 - Use proper transportation practices
 - Reduce the use of electronic prods, pipes, and sticks for moving animals
 - Calculate and properly time for castration and dehorning to minimize animal stress
 - Utilize body condition scoring to manage nutrition of animals
 - Utilize basic principles of dystocia and manage to avoid it
 - Use proper cattle handling and movement techniques
 - Construct a cattle handling facility
 - Improve heifer development
 - Implement a crossbreeding program
 - Target selection to management and environment
 - Market cattle in large uniform lots, access to premiums for better management
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- Develop an ag water quality plan
 - Implement ag water plan
 - Develop streamside buffers to prevent water runoff
 - Compost mortalities or dispose of properly
 - Utilize proper euthanasia techniques