

Analyzing Bull Cost in Beef Genetic Enhancement Program

The cost-share funds for qualified beef producers offer the opportunity to improve genetics in beef herds. Cost-share funds provide for 35% of the purchase price (up to \$1,200) for a bull that meets certain genetic criteria. Producers who have completed the Master Beef Producer Program are eligible for 50% cost share (also with a \$1,200 maximum). Producers must register their farms for the National Animal Identification System and become certified under the Beef Quality Assurance Program to become eligible for the funds. Cost-share funds will be awarded to the limits specified by the Tennessee Department of Agriculture. More information can be obtained from University of Tennessee Extension.

Some producers may shy away from purchasing higher quality bulls due to price. However, the genetic improvement that can be made from these bulls will often pay for themselves with increased selling weights and higher quality calves. Given the sale value of a cull bull with current prices and the cost share, producers can obtain superior genetics with a reduced out-of-pocket cost. The following tables show the number of pounds of increased selling weight needed to recover the cost of a bull under this program, given the stated criteria.

Table 1	Pounds Per Calf to Recover Bull Cost, 35% Cost-share 3Years Bull Life, \$0.95/lb Calf Price, 30 Cows, 90% Calf Crop				
New Bull Purchase Price	\$1,500	\$2,000	\$2,500	\$3,000	\$3,500
Cost Share	\$525	\$700	\$875	\$1,050	\$1,200
Cull Bull Proceeds ¹	\$990	\$990	\$990	\$990	\$990
Net Cost of New Bull	\$0	\$310	\$635	\$960	\$1,310
Increased Return per Calf to Offset Net Bull Cost	\$0	\$3.83	\$7.84	\$11.85	\$16.17
Added Pounds per Calf to Cover Net Bull Cost	0	4	8	12	17

¹Assumes cull bull sold at 1,800 pounds for \$55.00 per hundredweight.

Table 2	Pounds Per Calf to Recover Bull Cost, 35% Cost-share 4Years Bull Life, \$0.95/lb Calf Price, 30 Cows, 90% Calf Crop				
New Bull Purchase Price	\$1,500	\$2,000	\$2,500	\$3,000	\$3,500
Cost Share	\$525	\$700	\$875	\$1,050	\$1,200
Cull Bull Proceeds ¹	\$990	\$990	\$990	\$990	\$990
Net Cost of New Bull	\$0	\$310	\$635	\$960	\$1,310
Increased Return per Calf to Offset Net Bull Cost	\$0	\$2.87	\$5.88	\$8.89	\$12.13
Added Pounds per Calf to Cover Net Bull Cost	0	3	6	9	13

¹Assumes cull bull sold at 1,800 pounds for \$55.00 per hundredweight.

Table 3	Pounds Per Calf to Recover Bull Cost, 50% Cost Share 3Years Bull Life, \$0.95/lb Calf Price, 30 Cows, 90% Calf Crop				
New Bull Purchase Price	\$1,500	\$2,000	\$2,500	\$3,000	\$3,500
Cost Share	\$750	\$1,000	\$1,200	\$1,200	\$1,200
Cull Bull Proceeds ¹	\$990	\$990	\$990	\$990	\$990
Net Cost of New Bull	\$0	\$10	\$310	\$810	\$1,310
Increased Return per Calf to Offset Net Bull Cost	\$0	\$0.12	\$3.83	\$10.00	\$16.17
Added Pounds per Calf to Cover Net Bull Cost	0	0.1	4	11	17

¹Assumes cull bull sold at 1,800 pounds for \$55.00 per hundredweight.

Table 4	Pounds Per Calf to Recover Bull Cost, 50% Cost Share 4Years Bull Life, \$0.95/lb Calf Price, 30 Cows, 90% Calf Crop				
New Bull Purchase Price	\$1,500	\$2,000	\$2,500	\$3,000	\$3,500
Cost Share	\$750	\$1,000	\$1,200	\$1,200	\$1,200
Cull Bull Proceeds ¹	\$990	\$990	\$990	\$990	\$990
Net Cost of New Bull	\$0	\$10	\$310	\$810	\$1,310
Increased Return per Calf to Offset Net Bull Cost	\$0	\$0.09	\$2.87	\$7.50	\$12.13
Added Pounds per Calf to Cover Net Bull Cost	0	0.1	3	8	13

¹Assumes cull bull sold at 1,800 pounds for \$55.00 per hundredweight.

Improved genetics can also lead to higher quality calves which will also increase returns per calf. Grade 1-2 calves have sold around 10% higher than Grade 3 calves in recent years. Improving grade from 3's to 1's and 2's would result in increased returns of \$40 to \$45 per calf. Compare this amount to the “Increased Return per Calf to Offset Net Bull Cost” row in the tables.

Producers can use long-range planning and cash flow planning to study in more detail how improved genetics might increase net income on their farm. These programs are available through Extension’s MANAGE Program. All financial information is confidential and there is no cost for the program. Contact your county University of Tennessee Extension office for more information.