

Feed Efficiency for Feeders

Feed efficiency in the feedlot is 40% inheritable.

The bull contributes 50% of his efficiency to his progeny and the cow contributes 50%.

40% (feed efficiency inherited) x 50% (influence of the sire) = 20% impact (of a bull's efficiency on his calves).

W124's RFI (Residual Feed Index) is -7.92. He ate 7.92# of feed less than what would be expected of an animal his size would be expected to consume.

7.92# (W124's feed savings per day) x 20% (feed savings impact for a feedlot animal) = 1.58# less DMI for an animal on feed who is sired by W124.

1.58# less DMI equals a savings of 1.58# of corn cost per day. If the animal is in the feedlot for 150 days, 150 x 1.58 = 237# of feed saved during that time. So if you have 10 feedlot animals sired by W124 per year for 3 years, there will be a total of 30 head fed out. 30 hd x 237# = 7,110# of feed saved for those 30 head.

If there is a Bull A who has a -2.0 RFI, using the same process, the feed savings on 30 head is 1,800#. -2.0 RFI x 20% genetic impact x 30 head x 150 days on feed per head = -1,800#.

Then for Bull B, who has a +1.0 RFI, the feed use ends up being 900# MORE than average. +1.0 RFI x 20% genetic impact x 30 head x 150 days on feed per head = +900#.

Using the feed use differences in these 3 bulls of only 30 calves sired by each at different prices of corn shows the projected savings for each as follows:

Feedlot cost in corn price: \$4.00 corn/7.14 cents/# \$5/ 8.9 \$6 /10.7 \$6.75/12.05 \$7.25/12.9

<u>W124 calves (7,110#)</u>	\$507	\$632	\$760	\$856	\$917
<u>Bull A calves (1,800#)</u>	128	160	192	216	232
<u>Bull B calves (-900#)</u>	-64	-80	-96	-108	-116

There is a \$17-\$31 cost savings for every animal sired by W124 fed out compared to average, and that number shoots up to a high of \$35 cost advantage for W124 calves compared to Bull B calves.

The dollars add up. The feedlot savings show how important it is for a person to know the feed efficiency of the bull they are using. Is your bull making money or costing you more money in feed than needed. For our chart we added the feedlot savings showing above, to the cost of feed saved for 10 breeding heifers kept back per year for 3 years with an average cow life of 6 years as shown on the female feed costs page. The total of steer and heifer savings for only 60 head in 3 years add up to quite a surprising amount, as shown on the profit chart.

Feed efficiency can now be added as an important factor in improving the profitability of your herd/ Please feel free to contact us if you have any questions or ideas.