



Livestock Farm Management Update

December 20 2002

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Kansas State University, December 20, 2002.

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Cattle Production Budgets and Returns

By Rodney Jones, Extension Livestock Production Economics

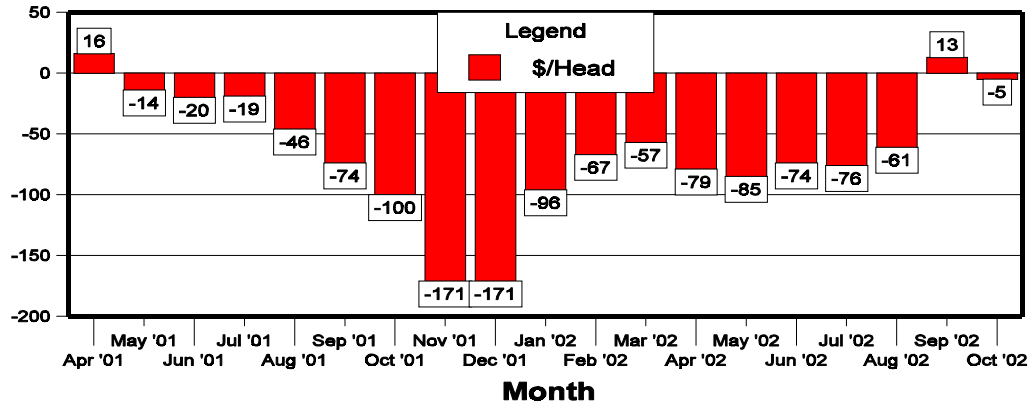
Based on this month's traditional cattle finishing budgets for 750 pound steers and 650 pound heifers, the expected break-even prices for December placements have increased once again relative to the projections of the previous month. The projected break-evens, for cattle expected to finish in about May, are in the \$75.00 to \$75.50 per cwt. range for heifers and steers. Average traditional weight feeder cattle prices have increased considerably in recent weeks. Supplies have been tight, and buyers are looking at more favorable spring fed cattle price projections. Performance expectations for December placements remain below annual averages. Both feed conversions and average daily gains for December placements are expected to be 5% to 7% worse than annual averages.

The ration charge projection has declined slightly for December placed cattle relative to earlier fall projections. Combining the ration charge projection with December placement performance expectations results in a feeding cost of gain projection of \$56.55 per cwt. for traditional weight December steer placements, and \$59.27 per cwt. for traditional weight December heifer placements. While still higher than current closeouts, these projections are somewhat lower than earlier projections for spring finished cattle. In addition to feed ingredients, yardage, processing, medication, and death loss are accounted for in feeding cost projections. Estimates are most sensitive to changes in feed conversions, daily gains, grain prices, and hay prices. To illustrate the risk associated with feed price uncertainty, each \$0.10 per bushel change in corn price changes feeding cost of gain by \$1.24 per cwt. In addition, each \$10.00 per ton change in hay price changes feeding cost of gain by \$0.49 per cwt.

The average October steer closeout returned an average of about \$-5.00 per head. Preliminary projections suggest similar results for November, and somewhat positive returns for average December closeouts. If current futures based price forecasts hold, cattle feeders are positioned to realize profits of \$40 to \$70 per head on early 2003 closeouts. Break-evens for current closeouts are averaging in the high \$60's, and will increase into the low \$70's after the first of the year. Current projections suggest that fed cattle prices will rebound into the mid \$70's by early 2003, resulting in the projected positive returns. The Southern Plains cattle feeding area, and Kansas in particular, has been blessed with very favorable cattle feeding weather for the last several winters. Feeders should keep in mind that weather related performance setbacks are very possible through the remainder of the winter. Unfavorable feeding conditions, or an unexpected increase in feed ingredient prices could impact cattle feeding returns relative to current expectations.

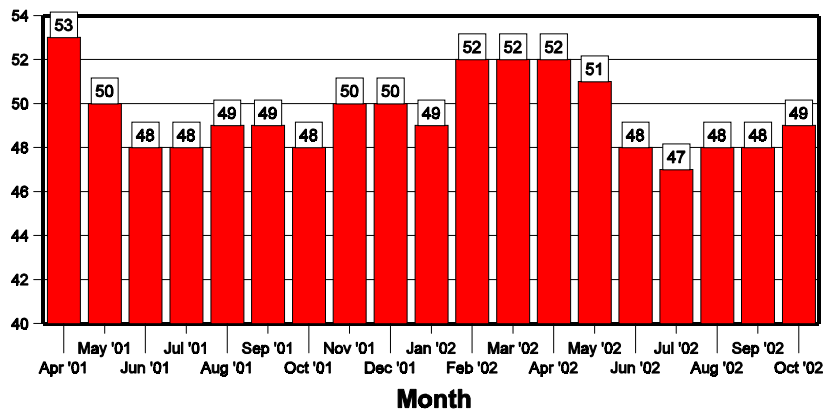
Economic results will be mixed for Kansas cow-calf producers in 2002. Fall calf prices have so far averaged around \$8.00 per cwt. less than the same period a year ago. In addition, many producers experienced significantly higher feed costs in 2002, due to drought conditions. Therefore, returns in 2002 will be lower than those experienced in 2001, when the average Kansas cow-calf producer generated returns above variable costs of about \$56.00 per cow. Current projections suggest that the average producer in Western Kansas will struggle to cover variable costs of production, while Eastern Kansas producers may generate average returns that are slightly above variable costs.

Monthly Returns for Finishing 700 to 800 Lb. Steers in Kansas



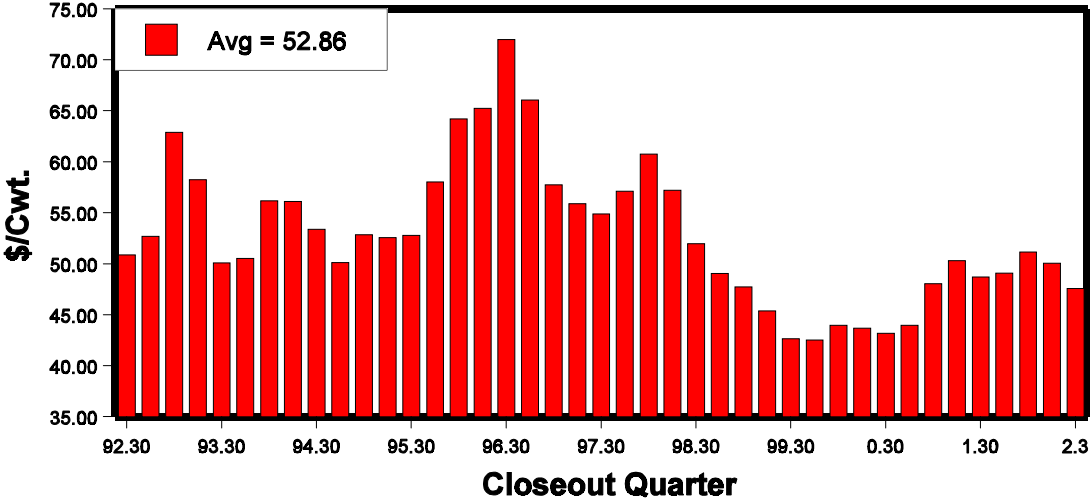
Source: KSU Cattle Return Series.

Monthly Feeding Cost of Gain 700 to 800 Lb. Steers in Kansas



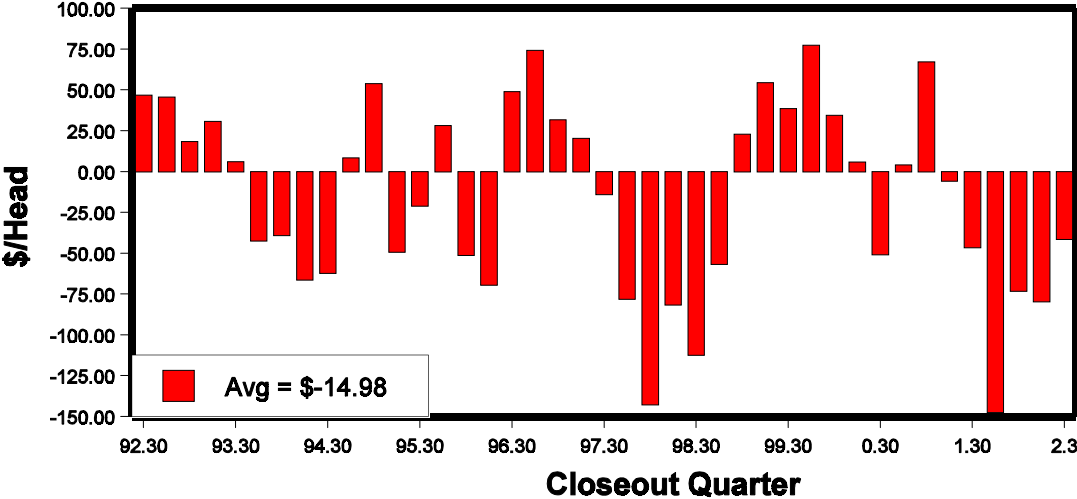
Source: KSU Cattle Return Series.

Quarterly Feeding Cost of Gain 700-800 Lb. Steers in Kansas



Source: KSU Cattle Return Series.

Quarterly Net Return for Finishing 700-800 Lb. Steers in Kansas



Source: KSU Cattle Return Series.

Commercial Feedlot Cattle Finishing Budget
November 2002 Placements (750 lb steers, 650 lb hfrs)

Assumptions	Steers	Heifers
Cost of feeder (\$/cwt.) ¹	\$85.00	\$82.80
Interest rate	8.0%	8.0%
Ration charge (\$/ton) ²	\$117.44	\$117.44
Yardage charge	\$0.05	\$0.05
Beginning weight	750 lbs.	650 lbs.
Pay weight	1250 lbs.	1075 lbs.
Gain	500 lbs.	425 lbs.
Days on feed	166 days	150 days
Shrink	4.0%	4.0%
Pay weight to pay weight:		
average daily gain	3.02 lbs.	2.84 lbs.
Feed conversion (as fed)	8.70 lbs.	9.07 lbs.
Death loss (in conversion)	0.50%	0.50%
Cost Budgets	Steers	Heifers
Feeder		
1. Cost of feeder:	\$637.50	\$538.20
2. Interest on feeder:	\$ 23.13	\$ 17.65
Feed		
3. Total feed cost:	\$255.44	\$226.36
4. Interest on feed:	\$ 4.63	\$ 3.71
Other Costs		
5. Yardage Charge:	\$ 8.28	\$ 8.48
6. Processing Charge:	\$ 7.00	\$ 7.00
8. Vet, drugs, supplies:	\$ 7.00	\$ 7.00
9. Interest on other V.C.:	\$.40	\$.35
Breakeven selling price:	\$ 75.47	\$ 75.14
Total cost of gain/cwt:	\$ 61.18	\$ 63.43
Feeding cost of gain/cwt: ³	\$ 56.55	\$ 59.27

¹Feeder steer and heifer prices based on recent auction results at major Kansas sale barns.

²Ration charge of \$117.44 based on corn price of \$2.67/bu., milo price of \$4.37/cwt., alfalfa hay price of \$111.00/ton, supplement price of \$192.50/ton, and feed markup of \$20/ton. Corn price change of \$0.10/bu. changes ration cost \$1.80/ton. Milo price change of \$0.10/cwt. changes ration cost \$0.70/ton. Alfalfa hay price change of \$10/ton changes ration cost \$1.20/ton. Supplement price change of \$25/ton changes ration cost \$0.75/ton.

³Excludes interest on feeder.

Commercial Feedlot

Sensitivity Analysis of Breakeven Prices for 750 lb. Steers

	Feeder purchase price				
	\$80.00	\$82.00	\$84.00	\$86.00	\$88.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$54.00	71.34	72.59	73.83	75.07	76.32
\$55.00	71.74	72.99	74.23	75.47	76.72
\$56.00	72.14	73.39	74.63	75.87	77.12
\$57.00	72.54	73.79	75.03	76.27	77.52
\$58.00	72.94	74.19	75.43	76.67	77.92
\$59.00	73.34	74.59	75.83	77.07	78.32
\$60.00	73.74	74.99	76.23	77.47	78.72

Commercial Feedlot

Sensitivity Analysis of Breakeven Prices for 650 lb. Heifers

	Feeder purchase price				
	\$78.00	\$80.00	\$82.00	\$84.00	\$86.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$56.00	70.85	72.10	73.35	74.60	75.85
\$57.00	71.24	72.49	73.74	74.99	76.24
\$58.00	71.64	72.89	74.14	75.39	76.64
\$59.00	72.04	73.28	74.53	75.78	77.03
\$60.00	72.43	73.68	74.93	76.18	77.43
\$61.00	72.83	74.07	75.32	76.57	77.82
\$62.00	73.22	74.47	75.72	76.97	78.22

FEEDING COST OF GAIN FOR STEERS BY CLOSEOUT MONTH (\$/cwt.)

	% Change Previous Year	2002	2001	2000	1990-2000 Average
January	+ 5.6	49.08	46.44	43.11	53.49
February	+11.0	52.12	46.97	43.76	55.45
March	+ 3.1	52.24	50.69	44.97	55.96
April	- 1.4	51.99	52.64	44.55	54.70
May	+ 1.0	50.58	50.08	43.29	53.42
June	- 1.3	47.56	48.20	43.20	51.56
July	- 3.6	46.66	48.42	43.01	50.29
August	- 1.6	48.05	48.88	43.43	52.04
September	- 1.7	47.96	48.77	43.10	51.07
October	+ 2.9	49.16	47.78	43.24	51.68
November		51.50 ^P	49.98	44.05	51.84
December		53.00 ^P	49.52	44.65	52.05

Source: Focus on Feedlots Newsletter, KSU Extension Animal Science and Cooperating Feedyards.

BREAKEVEN PRICES FOR FINISHING 700 TO 800 LB. STEERS (\$/cwt.)

	% Change Previous Year		2001	2000	1990-2000 Average
January	+ 3.5	75.49	72.93	65.68	71.42
February	+ 5.3	76.77	72.93	67.47	71.84
March	+ 2.6	76.90	74.90	68.15	71.65
April	- 3.4	74.15	76.74	69.61	71.27
May	- 5.2	72.22	76.16	71.27	71.00
June	- 7.1	69.56	74.85	71.72	70.21
July	- 4.8	69.02	72.47	69.99	69.50
August	- 7.7	67.80	73.48	69.69	68.86
September	-13.2	64.55	74.39	69.82	68.54
October	-11.3	65.83	74.20	69.92	68.74
November		68.59 ^P	77.46	72.56	70.60
December		69.81 ^P	76.46	73.62	71.35

^P Values for this month are projected

Hog Production Budgets and Returns

The hog finishing budget projects the economic outcome of taking a 10 pound early weaned pig through a combination nursery and finishing phase. The total feeding time is projected to be 170 days, so pigs started in December would be expected to finish in June of 2003. Ten pound weaned pigs are priced into the nursery using a formula based on current milo prices, current soybean meal prices, and 6 month out hog futures prices. The calculated price for 10 lb. pigs in December is \$34.55 per pig, up slightly from last month. Average Iowa direct weaned pig transfer prices have increased to levels close to the formula price. Recent improvements in hog price expectations have stimulated interest in weaned pigs to put on feed. Alternative budget projections and sensitivity tables are included to assess the impact of alternative weaned pig prices on break-even projections.

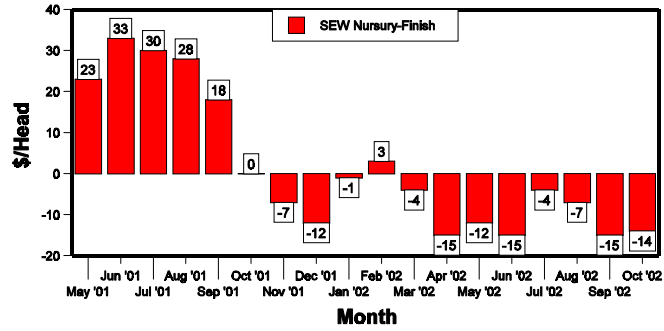
The projected sale price needed to cover all costs associated with finishing formula priced early weaned pigs started on feed in December is \$45.06 per cwt. on a live weight basis. Pricing the weaned pig into the nursery-finish program at the mid-point of the recent Iowa reported cash transfer price (\$33.00) results in a projected break-even to cover all costs of \$44.37 per cwt. Pigs placed in a nursery-finish program now are being placed against a futures based price forecast in the mid to upper \$40's on a live weight basis, suggesting the possibility for positive returns. Weaned pig producers are benefitting from improved hog price prospects as well, with weaned pig transfer prices above \$33.00 per pig covering all costs of production for average farrowing operations.

The example hog finishing budgets are calculated using a milo based feeding ration. Projected feed costs, based on current milo and supplement prices, are currently at \$19.54 per cwt. of live pork produced in the SEW nursery finish program. This projection represents a slight decrease from the estimates of recent months due to somewhat lower soybean meal and milo price projections. Feed costs are sensitive to changes in milo and soybean meal prices. For example, a milo price change of \$0.10 per cwt. changes feed costs per cwt. by \$0.22. A soybean meal price change of \$10 per ton changes feed costs by \$0.28 per cwt.

As expected, returns to labor and management averaged about \$-14.00 per pig for hogs exiting Kansas SEW nursery-finish barns in October. Preliminary calculations suggest that nursery-finish producers likely fell about \$11.00 per head short of covering all costs in November. Final return numbers are expected to look somewhat better for December, but returns will likely still be negative for average producers. Returns should continue to improve into early 2003, as lean hog prices recover from their fall lows. Break-evens for average nursery-finish producers will average in the upper \$30's per cwt. on a live weight basis for the next several months, before increasing to the low \$40's as higher priced weaned pigs work their way through the system by March and April of 2003.

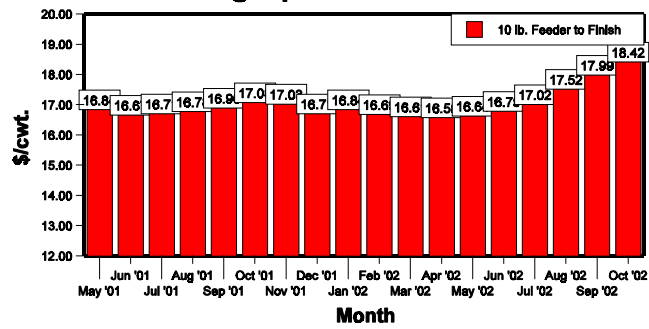
Average farrow-to-finish producers currently have break-evens in the low \$40's on a live weight basis. Futures based price forecasts suggest that positive net returns will return to these producers early in 2003 as well.

Returns to Labor and Management Finishing Operations in Kansas



Source: KSU Swine Return Series.

Feed Costs Per Cwt. SEW Nursery Finishing Operations in Kansas



Source: KSU Swine Return Series.

SEW NURSERY- FINISHING BUDGET

December, 2002

Assumptions	Barrows and Gilts
Initial weight of weaned pig	10 lbs.
Cost of weaned pig ¹	\$34.55
Interest rate	8.0 %
Feed conversion	3.00 lbs.
Death loss	5.00 %
Milo price	\$4.37 / cwt.
Soybean meal price	\$167.50 / ton.

¹ Weaned pig prices based on KSU formula.

COST BUDGET FOR FINISHING PIGS

FEEDER	
1. Cost of weaned pig	\$34.55
2. Interest on weaned pig	\$ 1.29
FEED	
3. Grain	\$21.87
4. Soybean meal	\$10.80
5. Vitamins and minerals	\$ 8.41
6. Starter	\$ 2.45
7. Interest on feed	\$ 0.81
OTHER VARIABLE COSTS	
8. Feed processing	\$ 2.99
9. Labor	\$ 2.88
10. Veterinary, drugs, and supplies	\$ 1.30
11. Utilities	\$ 0.50
12. Repairs	\$ 1.57
13. Miscellaneous	\$ 3.25
14. Interest on other variable costs	\$ 0.23
FIXED COSTS	
15. Buildings and equipment	\$11.97
Sale Price Needed to Cover Variable Costs	\$39.91
Sale Price Needed to Cover Total Costs	\$45.06
Feed Cost Per Cwt. of Pork Produced	\$19.54

SEW Nursery-Finishing

Sensitivity Analysis of Break-even Sale Price

	Purchase Price for 10 Lb. Weaned Pig				
	\$29.00	\$31.00	\$33.00	\$35.00	\$37.00
Feed Cost Per Cwt.	Break-even Sale Price for Market Hog (\$/cwt.)				
\$17.00	40.13	41.02	41.91	42.80	43.69
\$18.00	41.10	41.99	42.88	43.77	44.66
\$19.00	42.07	42.96	43.86	44.75	45.64
\$20.00	43.05	43.94	44.83	45.72	46.61
\$21.00	44.02	44.91	45.80	46.69	47.59
\$22.00	49.99	44.89	46.78	47.67	48.56
\$23.00	45.97	46.86	47.75	48.64	49.53

SEW Nursery-Finishing

Sensitivity Analysis of Maximum Weaned Pig Price

	Expected Sale Price for Market Hogs				
	\$41.00	\$43.00	\$45.00	\$47.00	\$49.00
Feed Cost Per Cwt.	Maximum Purchase Price for 10 lb. Weaned Pig				
\$17.00	30.95	35.44	39.92	44.41	48.90
\$18.00	28.77	33.26	37.74	42.23	46.72
\$19.00	26.59	31.08	35.56	40.05	44.54
\$20.00	24.41	28.90	33.38	37.87	42.36
\$21.00	22.23	26.72	31.20	35.69	40.18
\$22.00	20.05	24.54	29.02	33.51	38.00
\$23.00	17.87	22.36	26.84	31.33	35.82