



Livestock Farm Management Update

January 27, 2002

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Kansas State University, January 27, 2002.

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Cattle Production Budgets and Returns

By Rodney Jones, Extension Livestock Production Economics

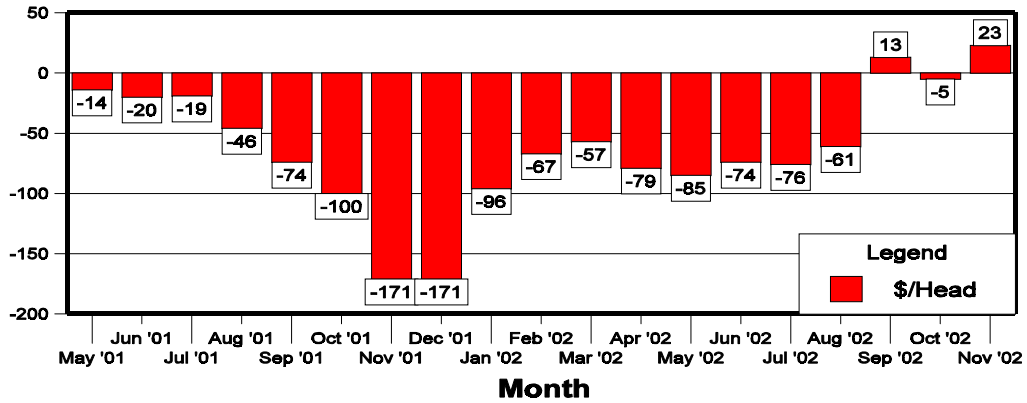
Based on this month's traditional cattle finishing budgets for 750 pound steers and 650 pound heifers, the expected break-even prices for January placements have decreased significantly relative to the projections of recent months. The projected break-evens, for cattle expected to finish in about June, are in the \$70.00 to \$71.00 per cwt. range for heifers and steers. This represents a decrease of around \$5.00 per cwt. in the break-even projection in the past month. Average traditional weight feeder cattle prices have decreased considerably over the past several weeks. In addition, performance expectations for January placements improve considerably relative to fall placements. For example, feed conversions for January placements are expected to be 1% to 2% better than annual averages. Cattle feeders are weighing these performance factors against market signals which suggest a weakening fed cattle market in late spring going into summer. Feeder cattle bids have adjusted downward rapidly to reflect fed cattle market expectations.

The ration charge projection continues to decline relative to earlier fall projections. Feedgrain markets have been surprisingly weak, and hay prices have backed off from fall highs as well. Combining the ration charge projection with January placement performance expectations results in a feeding cost of gain projection of \$51.99 per cwt. for traditional weight January steer placements, and \$54.45 per cwt. for traditional weight January heifer placements. These projections are considerably lower than earlier projections for late 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, based on winter performance expectations for steers each \$0.10 per bushel change in corn price changes feeding cost of gain by \$1.25 per cwt. In addition, each \$10.00 per ton change in hay price changes feeding cost of gain by \$0.49 per cwt.

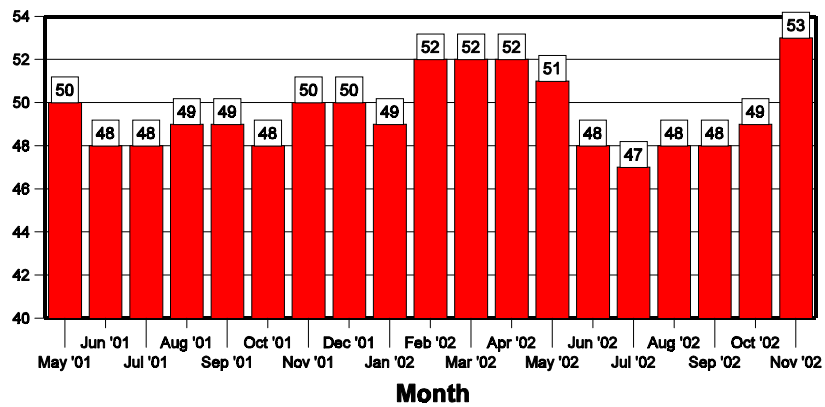
The most recent calculations suggest surprisingly strong positive results for recent closeouts. The average November steer closeout, for example, returned an average of about \$22.82 per head. Preliminary projections suggest even more positive economic results for December closeouts, with average positive returns of \$40 to \$45 per head expected when the final numbers come in. If current futures based price forecasts hold, cattle feeders are positioned to realize profits of \$50 to \$90 per head on average early 2003 closeouts. Break-evens for current closeouts are averaging around \$72.00 per cwt., increasing to around \$74.00 per cwt. by late April or May. Current projections suggest that fed cattle prices will remain in the upper \$70's for the next few months, resulting in much needed positive returns. Feeders should keep in mind that recent mild winters have been very favorable to cattle feeding in Kansas. Remember that weather related performance setbacks are always possible this time of year. In addition, there is a very real chance that feed ingredient prices could rally from their recent lows if dry weather conditions persist into spring. Unfavorable feeding conditions, or an unexpected increase in feed ingredient prices could impact cattle feeding returns relative to current expectations.

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



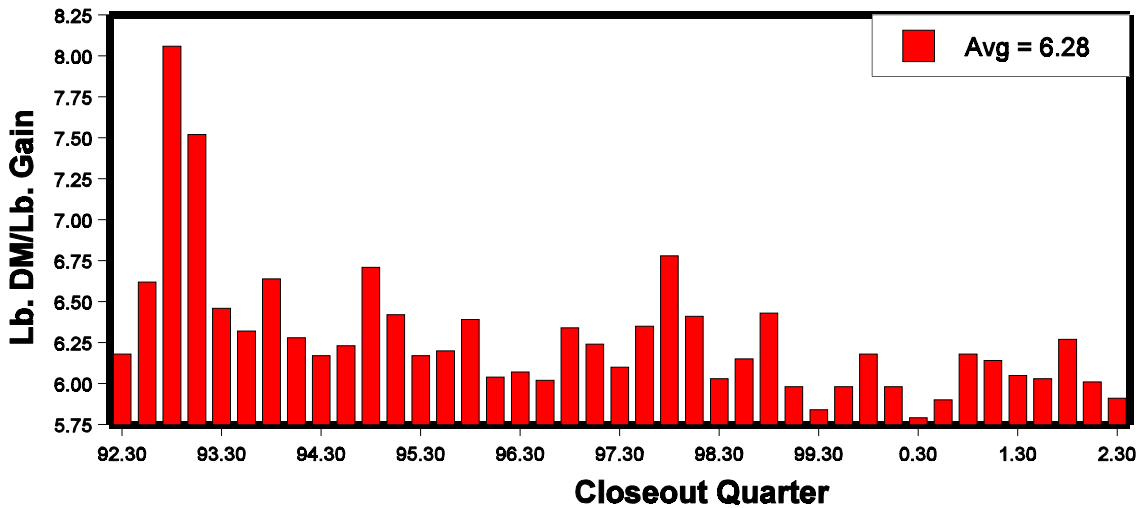
Source: KSU Cattle Return Series.

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



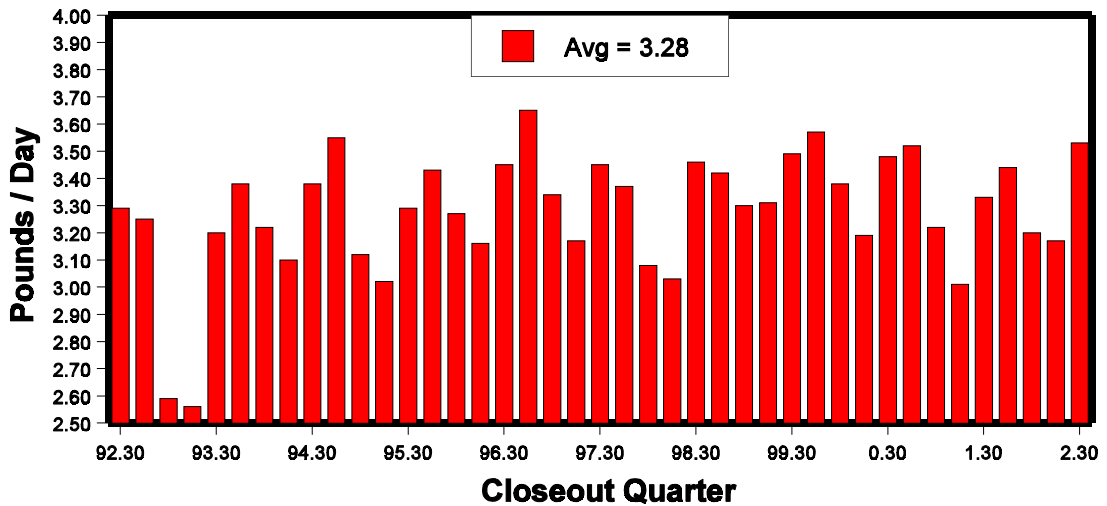
Source: KSU Cattle Return Series.

Quarterly Feed Conversion Finishing 700-800 Lb. Steers in Kansas



Source: KSU Cattle Return Series.

Quarterly Average Daily Gain Finishing 700-800 Lb. Steers In Kansas



Source: KSU Cattle Return Series.

Commercial Feedlot Cattle Finishing Budget
January 2003 Placements (750 lb steers, 650 lb hfrs)

Assumptions	Steers	Heifers
Cost of feeder (\$/cwt.) ¹	\$80.50	\$77.85
Interest rate	8.0%	8.0%
Ration charge (\$/ton) ²	\$114.92	\$114.92
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	155 days	150 days
Shrink	4.0%	4.0%
Pay weight to pay weight:		
average daily gain	3.23 lbs.	2.82 lbs.
Feed conversion (as fed)	8.14 lbs.	8.44 lbs.
Death loss (in conversion)	0.50%	0.50%
Cost Budgets	Steers	Heifers
Feeder		
1. Cost of feeder:	\$603.75	\$506.03
2. Interest on feeder:	\$ 20.48	\$ 16.72
Feed		
3. Total feed cost:	\$233.86	\$206.11
4. Interest on feed:	\$ 3.97	\$ 3.40
Other Costs		
5. Yardage Charge:	\$ 7.74	\$ 7.54
6. Processing Charge:	\$ 7.00	\$ 7.00
8. Vet, drugs, supplies:	\$ 7.00	\$ 7.00
9. Interest on other V.C.:	\$.37	\$.36
Breakeven selling price:	\$ 70.73	\$ 70.15
Total cost of gain/cwt:	\$ 56.08	\$ 58.38
Feeding cost of gain/cwt: ³	\$ 51.99	\$ 54.45

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

²Ration charge of \$114.92 based on corn price of \$2.63/bu., milo price of \$4.30/cwt., alfalfa hay price of \$100.00/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				
	\$76.00	\$78.00	\$80.00	\$82.00	\$84.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$50.00	67.15	68.39	69.63	70.87	72.11
\$51.00	67.55	68.79	70.03	71.27	72.51
\$52.00	67.95	69.19	70.43	71.67	72.91
\$53.00	68.35	69.59	70.83	72.07	73.31
\$54.00	68.75	69.99	71.23	72.47	73.71
\$55.00	69.15	70.39	71.63	72.87	74.11
\$56.00	69.55	70.79	72.03	73.27	74.51

Commercial Feedlot

Sensitivity Analysis of Breakeven Prices for 650 lb. Heifers

	Feeder purchase price				
	\$74.00	\$76.00	\$78.00	\$80.00	\$82.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$53.00	67.18	68.42	69.67	70.92	72.17
\$54.00	67.57	68.82	70.07	71.32	72.57
\$55.00	67.97	69.22	70.46	71.71	72.96
\$56.00	68.36	69.61	70.86	72.11	73.36
\$57.00	68.76	70.01	71.26	72.50	73.75
\$58.00	69.15	70.40	71.65	72.90	74.15
\$59.00	69.55	70.80	72.05	73.30	74.54

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

	% Change Previous Year	2003	2002	2001	1990-2001 Average
January		54.50 ^P	49.08	46.44	52.63
February		55.00 ^P	52.12	46.97	54.48
March		54.50 ^P	52.24	50.69	55.04
April		53.00 ^P	51.99	52.64	53.85
May			50.58	50.08	52.57
June	- 1.3		47.56	48.20	50.86
July	- 3.6		46.66	48.42	49.68
August	- 1.6		48.05	48.88	51.32
September	- 1.7		47.96	48.77	50.41
October	+ 2.9		49.16	47.78	50.98
November	+ 5.3		52.64	49.98	51.19
December			53.00 ^P	49.52	51.43

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	2003	2002	2001	1990-2001 Average
January		71.75 ^P	75.49	72.93	70.94
February		72.30 ^P	76.77	72.93	71.48
March		72.43 ^P	76.90	74.90	71.36
April		72.95 ^P	74.15	76.74	71.13
May			72.22	76.16	71.02
June	- 7.1		69.56	74.85	70.34
July	- 4.8		69.02	72.47	69.54
August	- 7.7		67.80	73.48	68.93
September	-13.2		64.55	74.39	68.65
October	-11.3		65.83	74.20	68.84
November	-11.8		68.35	77.46	70.76
December			69.71 ^P	76.46	71.54

^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 January would be expected to finish in July. 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 January is \$32.64 per pig, down somewhat from last month. Conversely, average Iowa direct weaned pig transfer prices have continued to increase to the point where the average is now above the calculated formula price. 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 January is \$44.20 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 (\$35.25) results in a projected break-even to cover all costs of \$45.36 per cwt. Pigs placed in a nursery-finish program now are being placed against a futures based price forecast in the mid \$40's on a live weight basis, suggesting just about a break-even when all economic costs are considered.

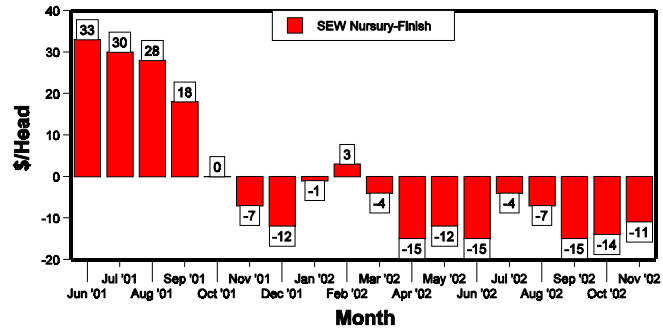
The example hog finishing budgets are calculated using a milo based feeding ration. Projected feed costs, based on current milo and supplement prices, are currently at \$19.54 per cwt. of live pork produced in the SEW nursery finish program. This projection

is the same as last month's estimate. Cash milo prices continue to decline, while soybean meal prices have increased slightly in recent weeks. Feed costs are primarily impacted by 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. The recent weakness in feedgrain prices, and the potential for a significant rally if drought conditions persist, suggests that risk averse producers might consider "locking in" feedgrain prices for a portion of future needs.

As expected, returns to labor and management averaged about \$-11.00 per pig for hogs exiting Kansas SEW nursery-finish barns in November. Early estimates suggest somewhat better results (\$-6.50 per pig) for December. Earlier expectations were for a rebound in profitability by early 2003. Lean hog prices have not recovered as quickly as previously expected, delaying the return to positive returns. Current projections suggest that final return numbers January will be similar to recent months, with returns gradually improving into the spring. Break-evens for average nursery-finish producers will average in the upper \$30's per cwt. on a live weight basis for the next few 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. Current futures based hog price forecasts suggest that prices will be at or slightly above break-even levels for average producers by early spring.

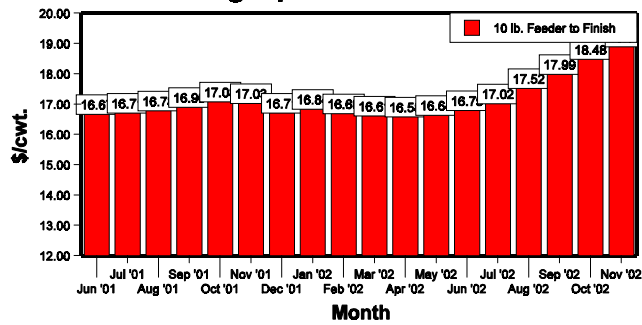
Average farrow-to-finish producers currently have break-evens in the low \$40's on a live weight basis. Futures based price forecasts suggest that positive net returns will return to these producers later in the spring.

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

January, 2003

Assumptions	Barrows and Gilts
Initial weight of weaned pig	10 lbs.
Cost of weaned pig ¹	\$32.64
Interest rate	8.0 %
Feed conversion	3.00 lbs.
Death loss	5.00 %
Milo price	\$4.30 / cwt.
Soybean meal price	\$175.70 / ton.

¹ Weaned pig prices based on KSU formula.

COST BUDGET FOR FINISHING PIGS

FEEDER	
1. Cost of weaned pig	\$32.64
2. Interest on weaned pig	\$ 1.22
FEED	
3. Grain	\$21.52
4. Soybean meal	\$11.33
5. Vitamins and minerals	\$ 8.74
6. Starter	\$ 1.93
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	\$39.06
Sale Price Needed to Cover Total Costs	\$44.20
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