



Livestock Farm Management Update

April 26, 2002

Prepared By Rodney Jones, Associate Professor / Extension Livestock Production Economist,
Kansas State University, April 26, 2002.

In This Issue....

Severe financial losses continue as both cash and futures prices continue to decline in the face of large total meat supplies..... 2

Current profits, and future profit expectations decline in the face of rapidly declining cash hog prices and a collapse in lean hog futures..... 8

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 April placements have decreased significantly relative to projections of a few months ago. The projected break-evens, for cattle expected to finish in about September, are in the \$64.00 to \$64.25 per cwt. range for steers and heifers. Average traditional weight feeder cattle prices have declined rapidly over the past several weeks, reflecting sharp declines in fed cattle prices and continued financial losses in the cattle feeding industry. Feed grain and hay prices declined over the past month, while protein prices increased slightly. The net result is a lower projected ration charge. Feed conversions and average daily gains of April placed cattle are expected to be about 4% better than annual averages. The lower ration charge expectations and improved performance expectations contribute to declining cost of gain projections.

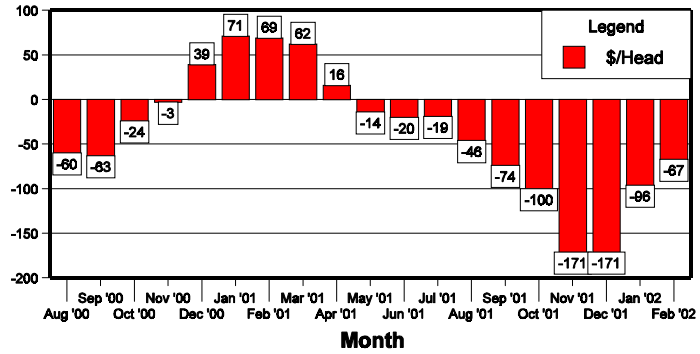
Combining the ration charge projection with April placement performance expectations results in a feeding cost of gain projection of \$43.46 per cwt. for traditional weight April steer placements, and \$46.37 per cwt. for traditional weight April heifer placements. The feeding cost of gain estimates depicted in the accompanying budgets are based on current feed prices and seasonal average performance. Alternative projections based on use-weighted futures based price projections for feed ingredients yield somewhat higher feeding cost of gain estimates. In addition to feed ingredients, yardage, processing, medication, and death loss are accounted for. Estimates are sensitive to changes in feed conversions, daily gains, grain prices, and hay prices. Feed conversions, grain prices, and hay

prices are positively related to feeding cost of gains. Based on spring performance estimates, each \$0.10 per bushel change in corn price changes feeding cost of gain by \$1.25 per cwt. Each \$10.00 per ton change in hay prices changes feeding cost of gain by \$0.48 per cwt. Feeding cost of gain changes by \$0.53 per cwt. for each 0.10 pound change in feed conversions and \$0.08 per cwt. for each 0.10 pound change in daily gains.

Calculated losses on February finished cattle came in strongly negative. The average February steer closeout returned about \$-67.11 per head, adding to the large losses of the previous several months. Preliminary estimates suggest average returns of \$-33.00 per head on March closeouts, and late spring and summer closeouts are currently projected to lose between \$90.00 and \$120.00 per head. The rapid decline in the cattle futures price complex over the past several weeks will need to reverse, and cash prices will need to rebound before there is any hope for improved returns to cattle feeding. Average break-evens for Summer finished cattle are projected to be around \$70.00 per cwt., compared to current summer futures in the very low \$60's.

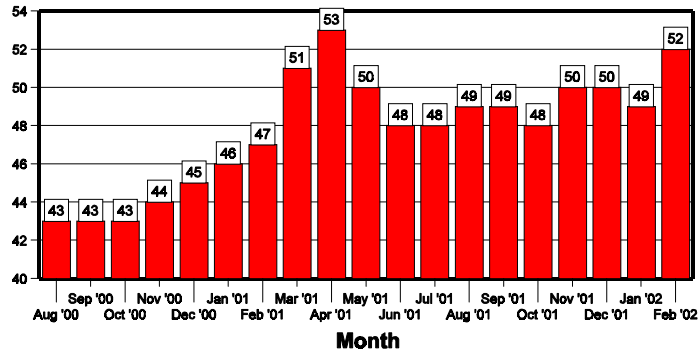
Based on recent steer calf prices, the accompanying summer grazing budget projections suggest break-evens of around \$80.35 per cwt. for heavier steers leaving full season grazing programs in the fall, and around \$82.75 per cwt for lighter steers leaving early intensive grazing programs in the late summer. Based on current price projections, producers may need to retain ownership into a feeding program in order to recover all 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.

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

Assumptions	Steers	Heifers
Cost of feeder (\$/cwt.) ¹	\$75.12	\$73.32
Interest rate	8.5%	8.5%
Ration charge (\$/ton) ²	\$97.62	\$97.62
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	147 days	145 days
Shrink	4.0%	4.0%
Pay weight to pay weight:		
average daily gain	3.40 lbs.	2.94 lbs.
Feed conversion (as fed)	7.88 lbs.	8.32 lbs.
Death loss (in conversion)	0.50%	0.50%
Cost Budgets	Steers	Heifers
Feeder		
1. Cost of feeder:	\$563.40	\$476.58
2. Interest on feeder:	\$ 19.29	\$ 16.04
Feed		
3. Total feed cost:	\$192.30	\$172.59
4. Interest on feed:	\$ 3.29	\$ 2.90
Other Costs		
5. Yardage Charge:	\$ 7.35	\$ 7.23
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:	\$ 64.00	\$ 64.16
Total cost of gain/cwt:	\$ 47.32	\$ 50.15
Feeding cost of gain/cwt: ³	\$ 43.46	\$ 46.37

¹Feeder steer and heifer prices based on recent auction results at Winter Auction, Dodge City, Kansas.

²Ration charge of \$97.62 based on corn price of \$2.12/bu., milo price of \$3.19/cwt., alfalfa hay price of \$95.00/ton, supplement price of \$197.00/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				
	\$71.00	\$73.00	\$75.00	\$77.00	\$79.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$41.00	60.46	61.70	62.94	64.18	65.42
\$42.00	60.86	62.10	63.34	64.58	65.82
\$43.00	61.26	62.50	63.74	64.98	66.22
\$44.00	61.66	62.90	64.14	65.38	66.62
\$45.00	62.06	63.30	64.54	65.78	67.02
\$46.00	62.46	63.70	64.94	66.18	67.42
\$47.00	62.86	64.10	65.34	66.58	67.82

Commercial Feedlot

Sensitivity Analysis of Breakeven Prices for 650 lb. Heifers

	Feeder purchase price				
	\$70.00	\$72.00	\$74.00	\$76.00	\$78.00
Feeding Cost of Gain (\$/cwt.)	-----Breakeven Price----- (\$/cwt.)				
\$43.00	60.75	62.00	63.25	64.50	65.75
\$44.00	61.15	62.40	63.65	64.90	66.15
\$45.00	61.54	62.79	64.04	65.29	66.54
\$46.00	61.94	63.19	64.44	65.69	66.94
\$47.00	62.33	63.58	64.83	66.08	67.33
\$48.00	62.73	63.98	65.23	66.48	67.73
\$49.00	63.12	64.37	65.62	66.87	68.12

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		50.00 ^P	50.69	44.97	55.96
April		49.00 ^P	52.64	44.55	54.70
May		47.00 ^P	50.08	43.29	53.42
June		46.00 ^P	48.20	43.20	51.56
July		46.00 ^P	48.42	43.01	50.29
August			48.88	43.43	52.04
September	+13.2		48.77	43.10	51.07
October	+10.5		47.78	43.24	51.68
November	+13.5		49.98	44.05	51.84
December	+10.9		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		75.67 ^P	74.90	68.15	71.65
April		73.08 ^P	76.74	69.61	71.27
May		70.80 ^P	76.16	71.27	71.00
June		69.65 ^P	74.85	71.72	70.21
July		70.22 ^P	72.47	69.99	69.50
August			73.48	69.69	68.86
September	+ 6.5		74.39	69.82	68.54
October	+ 6.1		74.20	69.92	68.74
November	+ 6.8		77.46	72.56	70.60
December	+ 3.9		76.46	73.62	71.35

^P Values for this month are projected

2002 Flint Hills Grazing Budgets

Assumptions	Season-Long	Early Intensive
In Date	May 1	May 1
In Weight	550 lbs.	550 lbs.
Purchase Price	\$91.00	\$91.00
Interest Rate	8.5 %	8.5 %
Grazing Charge Per Head	\$62.50	\$50.00
Daily Gain ¹	1.60 lbs.	2.0 lbs.
Total Gain Per Head ¹	240 lbs.	180 lbs.
Acres Per Head	4.0	2.5
Total Gain Per Acre ¹	57.0 lbs.	67.6 lbs.
Death Loss	1.5 %	1.5 %
Shrink	3.0 %	3.0 %
Out Weight	790 lbs.	730 lbs.
Out Date	Oct 1	Aug 1
Cost Budgets		
FEEDER		
1. Cost of Feeder	\$500.50	\$500.50
2. Interest on Feeder	\$ 17.73	\$ 10.64
OTHER COSTS		
3. Grazing Charge	\$ 62.50	\$ 50.00
4. Vitamins and Minerals	\$ 4.80	\$ 2.40
5. Vet., Drugs, Supplies	\$ 9.00	\$ 8.50
6. Labor	\$ 6.00	\$ 4.00
7. Miscellaneous	\$ 19.50	\$ 16.50
8. Int. on Other Costs	\$ 1.80	\$.86
Breakeven Selling Price	\$ 80.35	\$ 82.76
Total Cost of Gain/Cwt.	\$ 54.69	\$ 55.97
Feeding Cost of Gain/Cwt.	\$ 46.92	\$ 49.68

¹ Total gain per head, and total gain per acre have been adjusted for shrink and death loss.

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 April would be expected to finish in October. 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 April decreased considerably from last month's calculation, to \$26.28 per pig. The continuing decline in the formula weaned pig price is due to continued weakness in the 6 month out hog futures price, and slightly higher soybean meal prices. Average Iowa direct weaned pig transfer prices also decreased significantly over the past month, and now average only slightly above the 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 April is \$39.02 per cwt. on a live weight basis, continuing the trend of lower break-even projections over the past few months. Pricing the weaned pig into the nursery-finish program at the mid-point of the recent Iowa reported cash transfer price (\$28.00) results in a projected break-even to cover all costs of \$39.79 per cwt.

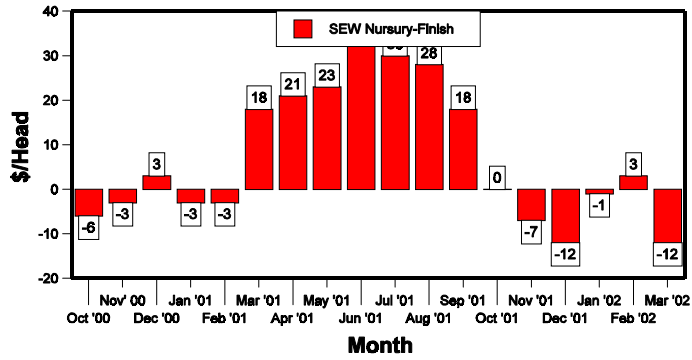
The example hog finishing budgets are calculated using a milo based feeding ration. Projected feed costs, based on current milo and supplement prices, are currently at

\$17.02 per cwt. of pork produced in the SEW nursery finish program. Projected feed costs have remained fairly constant over the past few months. 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. Soybean meal prices have increased somewhat over the past month, however, feedgrain price declines have essentially offset the soybean meal price increases.

Returns to labor and management averaged about \$2.92 per pig for hogs exiting Kansas SEW nursery-finishing barns in February. Current calculations suggest that average returns declined in March and April as hog prices broke sharply. Returns to labor and management for March and April finished hogs will likely average in the \$-12.00 to \$-21.00 per head range. Break-even prices to cover all costs for average producers are currently in the \$40.50 to \$41.00 per cwt. range on a live weight basis, and will increase over the next few months as higher valued weaned pigs begin to finish.

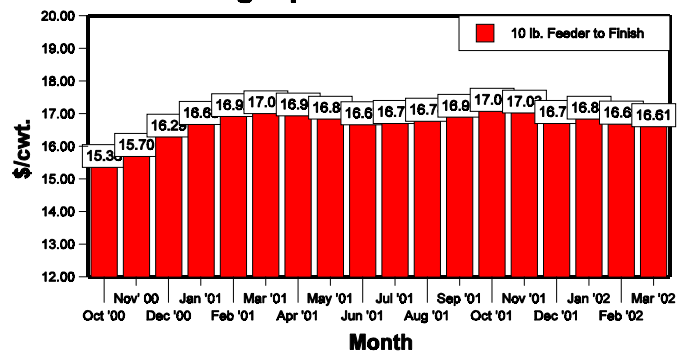
Similarly, projected break-evens for average Kansas farrow-to-finish producers are currently just under \$41.00 per cwt. on a live basis for pigs produced under current feed cost conditions. The recent dramatic downward adjustment in futures based price expectations suggests that it is unlikely that significant profits will accrue to Kansas hog producers in the foreseeable future.

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

April, 2002

Assumptions	Barrows and Gilts
Initial weight of weaned pig	10 lbs.
Cost of weaned pig ¹	\$26.28
Interest rate	9.0 %
Feed conversion	3.00 lbs.
Death loss	5.00 %
Milo price	\$3.19 / cwt.
Soybean meal price	\$172.00 / ton.

¹ Weaned pig prices based on KSU formula.

COST BUDGET FOR FINISHING PIGS

FEEDER	
1. Cost of weaned pig	\$26.28
2. Interest on weaned pig	\$ 1.10
FEED	
3. Grain	\$15.97
4. Soybean meal	\$11.09
5. Vitamins and minerals	\$ 8.41
6. Starter	\$ 2.45
7. Interest on feed	\$ 0.79
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	\$ 0.26
FIXED COSTS	
15. Buildings and equipment	\$11.97
Sale Price Needed to Cover Variable Costs	\$33.87
Sale Price Needed to Cover Total Costs	\$39.02
Feed Cost Per Cwt. of Pork Produced	\$17.02

SEW Nursery-Finishing

Sensitivity Analysis of Break-even Sale Price

	Purchase Price for 10 Lb. Weaned Pig				
	\$24.00	\$26.00	\$28.00	\$30.00	\$32.00
Feed Cost Per Cwt.	Break-even Sale Price for Market Hog (\$/cwt.)				
\$14.00	35.06	35.96	36.85	37.75	38.64
\$15.00	36.04	36.93	37.83	38.73	39.62
\$16.00	37.02	37.91	38.81	39.70	40.60
\$17.00	37.99	38.89	39.78	40.68	41.57
\$18.00	38.97	39.96	40.76	41.65	42.55
\$19.00	39.94	40.84	41.73	42.63	43.52
\$20.00	40.92	41.81	42.71	43.61	44.50

SEW Nursery-Finishing

Sensitivity Analysis of Maximum Weaned Pig Price

	Expected Sale Price for Market Hogs				
	\$35.00	\$37.00	\$39.00	\$41.00	\$43.00
Feed Cost Per Cwt.	Maximum Purchase Price for 10 lb. Weaned Pig				
\$14.00	23.86	28.33	32.80	37.27	41.73
\$15.00	21.68	26.15	30.62	35.09	39.55
\$16.00	19.50	23.97	28.44	32.91	37.37
\$17.00	17.32	21.79	26.26	30.73	35.19
\$18.00	15.14	19.61	24.08	28.55	33.01
\$19.00	12.96	17.43	21.90	26.37	30.83
\$20.00	10.78	15.25	19.72	24.19	28.65