



Livestock Farm Management Update

July 11 2003

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Kansas State University, July 11, 2003.

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Cattle Production Budgets and Returns

By Rodney Jones, Extension Livestock Production Economics

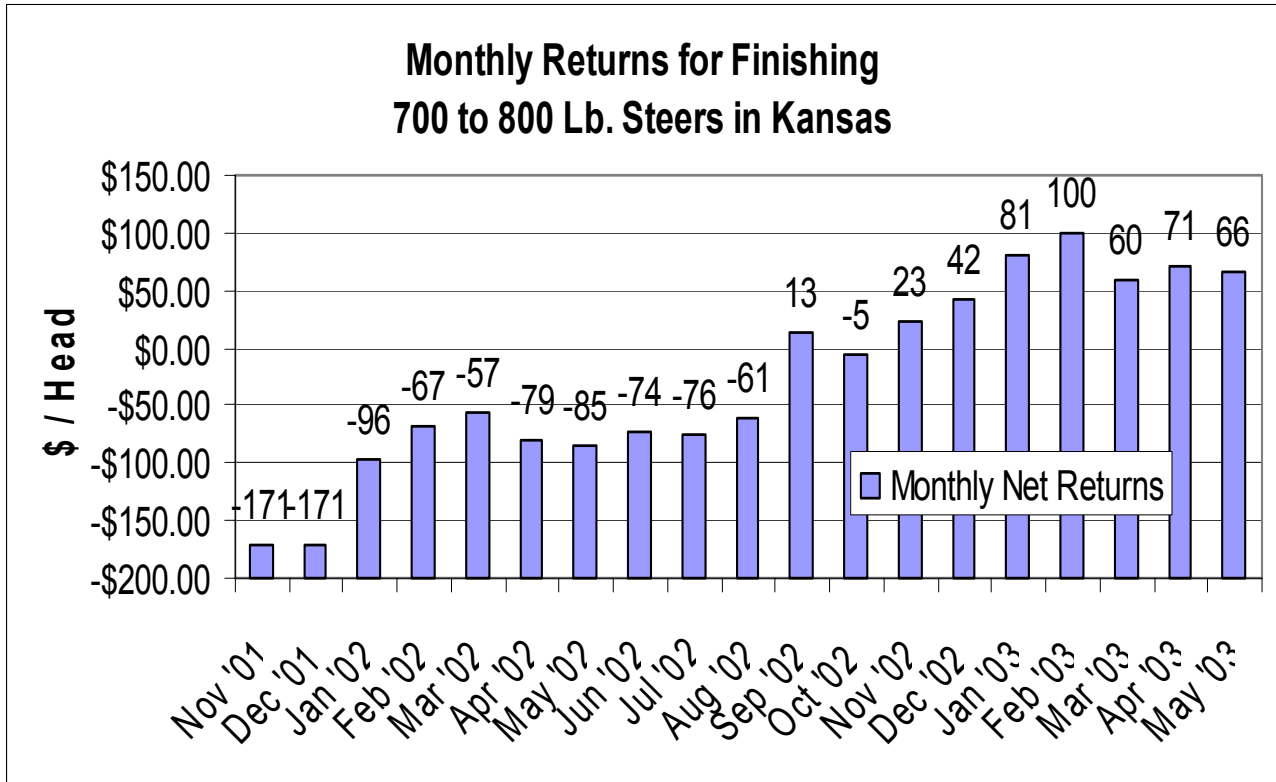
Based on this month's traditional cattle finishing budgets for 750 pound steers and 650 pound heifers, the expected break-even prices for July placements remained consistent with last month's projections. The projected break-evens, for cattle expected to finish in about December, are in the \$73.50 to \$74.00 per cwt. range for heifers and steers. Higher feeder cattle prices are being at least partially offset by declining feeding cost projections. Performance expectations for current placements remain favorable from a seasonal perspective. Feed conversions and average daily gains for July placements are expected to be 4% to 6% better than annual averages. For most of the past several months feeding conditions have resulted in performance numbers that, on average, have far exceeded projections.

For several years I have calculated a ration charge projection (and in turn a feeding cost of gain projection) based on placement month corn, milo, ground alfalfa, and protein supplement prices. The ration charge projection calculated using that method continues to decline from recent months. In addition, beginning this month I am changing the method of calculating the projection. I am now using a use-weighted combination of placement month ingredient prices, and projections for ingredient prices over the following four months, and am using corn as the only feedgrain ingredient. Recent weakness in both current, and near term projected feedgrain and hay prices results in a ration charge projection that is 4% to 5% lower than the projections of recent months. Combining the ration charge projection with favorable July placement performance expectations results in a feeding cost of gain projection of \$47.54 per cwt. for traditional weight July steer placements, and \$49.78 per cwt. for traditional weight July heifer placements.

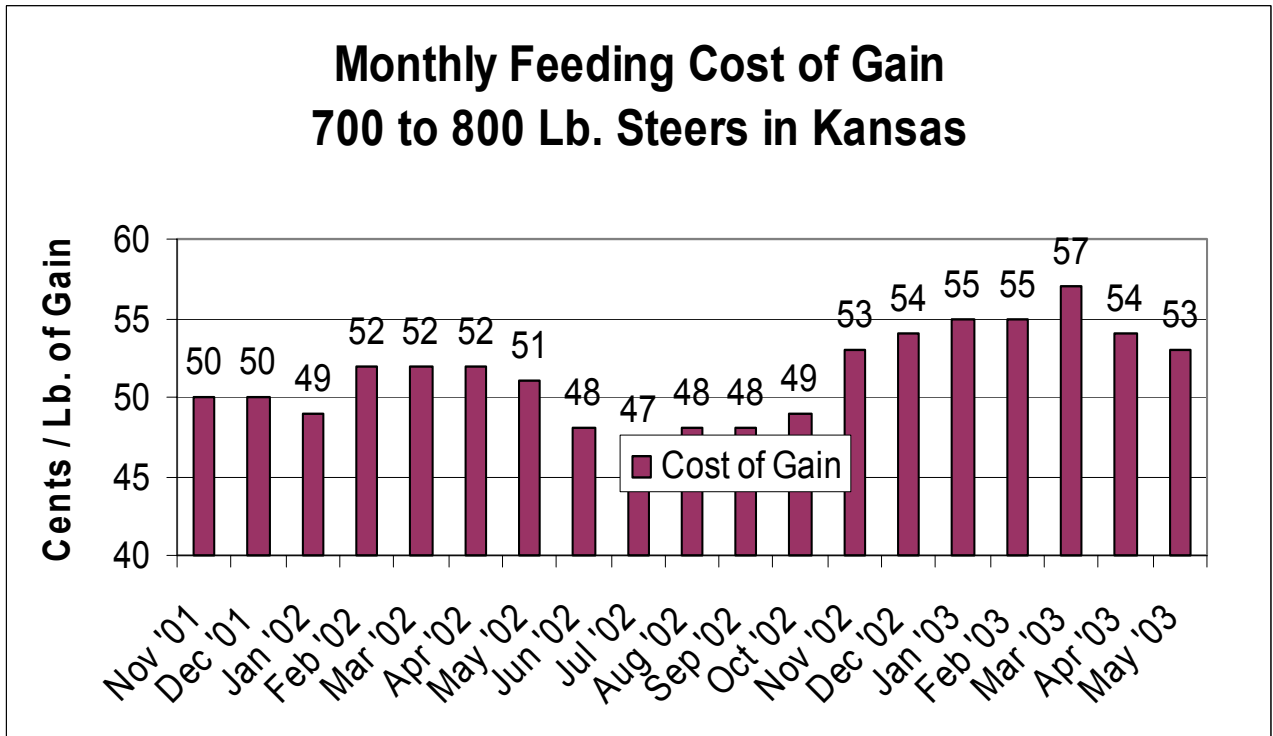
These are significant reductions relative to the projections of recent months. In addition to feed ingredients, yardage, processing, medication, and death loss are accounted for in feeding cost projections. Estimates are most sensitive to changes in feed conversions, daily gains, grain prices, and hay prices. Based on summer placed performance expectations, each \$0.10 per bushel change in corn price changes feeding cost of gain by \$1.30 per cwt. In addition, each \$10.00 per ton change in hay price changes feeding cost of gain by \$0.48 per cwt.

With each passing month of continued favorable crop growing conditions, there is less risk of a summer feedgrain price rally. Current, and near term future overall feedgrain price levels look attractive for livestock feeders. However, in many areas current basis levels are abnormally high, meaning local cash feedgrain prices are high relative to the broader market. Favorable growing conditions should result in a weakening of feedgrain basis over the next several months as local crop prospects improve, providing what attractive purchasing opportunities. Risk averse producers should keep in mind that there is still some risk of higher feedgrain prices if growing conditions deteriorate.

Final average April and May steer closeout returns came in about as expected. The average April steer closeout returned about \$71.00 per head, and the average May steer closeout returned about \$66.00 per head above all costs. Average sale prices over the period were in the very high \$70's, with average break-evens under \$73.50 per cwt. Early projections suggest that June closeouts generated positive returns of around \$90 per head on average, with individual pens resulting in returns of well over \$100.00 per head



Source: KSU Cattle Return Series.



Source: KSU Cattle Return Series.

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

Assumptions	Steers	Heifers
Cost of Feeder (\$/cwt.) ¹	\$89.00	\$86.50
Interest Rate	7.0%	7.0%
Ration Charge (\$/ton) ²	\$107.06	\$107.06
Yardage Charge (\$/head/day)	\$ 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	139 days
Shrink	4.0 %	4.0 %
Pay weight to pay weight:		
Average daily gain	3.47 lbs.	3.07 lbs.
Feed conversion (as fed)	7.96 lbs.	8.21 lbs.
Death loss (in conversion)	0.50 %	0.50 %
Cost Budgets	Steers	Heifers
Feeder		
1. Cost of feeder:	\$667.50	\$562.25
2. Interest on feeder:	\$ 18.83	\$ 14.93
Feed		
3. Total feed cost:	\$213.04	\$187.87
4. Interest on feed:	\$ 3.00	\$ 2.49
Other Costs		
5. Yardage Charge:	\$ 7.35	\$ 6.92
6. Processing Charge:	\$ 7.00	\$ 7.00
7. Vet, drugs, supplies:	\$ 7.00	\$ 7.00
8. Interest on other costs:	\$ 0.34	\$ 0.28
Break-even selling price:	\$ 73.92	\$ 73.37
Total cost of gain / cwt:	\$ 51.31	\$ 53.29
Feeding cost of gain / cwt: ³	\$ 47.54	\$ 49.78

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

² Ration charge of \$107.06 is a use-weighted projection over the feeding period based on a corn price of \$2.33 / bu., alfalfa hay price of \$78.75 / ton, supplement price of \$225.14 / ton and feed markup of \$20.00 / ton. An average corn price change over the feeding period of \$0.10 / bu. changes the ration cost \$2.91 / ton. An average alfalfa hay price change of \$10.00 / ton changes the ration cost \$1.20 / ton. An average supplement price change of \$25.00 / ton changes the ration cost \$0.75 / ton.

³ Excludes interest on feeder animal

Commercial Feedlot
Sensitivity Analysis of Break-even Prices for 750 lb. Steers

	Feeder Purchase Price				
	\$85.00	\$87.00	\$89.00	\$91.00	\$93.00
Feeding Cost Of Gain (\$ /cwt.)	-----Break-even Price----- (\$ / cwt.)				
\$46.00	70.84	72.07	73.31	74.54	75.77
\$47.00	71.24	72.47	73.71	74.94	76.17
\$48.00	71.64	72.87	74.11	75.34	76.57
\$49.00	72.04	73.27	74.51	75.74	76.97
\$50.00	72.44	73.67	74.91	76.14	77.37
\$51.00	72.84	74.07	75.31	76.54	77.77
\$52.00	73.24	74.47	75.71	76.94	78.17

Commercial Feedlot
Sensitivity Analysis of Break-even Prices for 650 lb. Heifers

	Feeder Purchase Price				
	\$82.00	\$84.00	\$86.00	\$88.00	\$90.00
Feeding Cost Of Gain (\$ /cwt.)	-----Break-even Price----- (\$ / cwt.)				
\$48.00	69.87	71.12	72.36	73.60	74.84
\$49.00	70.27	71.51	72.75	73.99	75.24
\$50.00	70.67	71.91	73.15	74.39	75.63
\$51.00	71.06	72.30	73.54	74.78	76.03
\$52.00	71.46	72.70	73.94	75.18	76.42
\$53.00	71.85	73.09	74.33	75.58	76.82
\$54.00	72.25	73.49	74.73	75.97	77.21

Feeding Cost of Gain For Steers By Closeout Month (\$/cwt.)

	% Change Previous Year	2003	2002	2001	1990-2001 Average
January	+12.0	54.99	49.08	46.44	52.63
February	+ 5.0	54.79	52.12	46.97	54.48
March	+ 9.0	56.94	52.24	50.69	55.04
April	+ 4.0	54.08	51.99	52.64	53.85
May	+ 4.0	52.60	50.58	50.08	52.57
June		52.68 ^P	47.56	48.20	50.86
July		51.16 ^P	46.66	48.42	49.68
August		50.39 ^P	48.05	48.88	51.32
September		49.24 ^P	47.96	48.77	50.41
October		48.75 ^P	49.16	47.78	50.98
November		47.80 ^P	52.64	49.98	51.19
December		47.54 ^P	53.69	49.52	51.43

^P Values for this month are projected

Source of Actual Historical Feeding Cost of Gain: Focus on Feedlots Newsletter, KSU
Extension Animal Science and Cooperating Feedyards.

Break-even Prices for Finishing Steers (\$/cwt.)

	% Change Previous Year	2003	2002	2001	1990-2001 Average
January	- 5.0	71.69	75.49	72.93	70.94
February	- 6.2	71.98	76.77	72.93	71.48
March	- 5.4	72.72	76.90	74.90	71.36
April	- 1.1	73.33	74.15	76.94	71.13
May	- 1.8	73.49	72.22	76.16	71.02
June		71.78 ^P	69.56	74.85	70.34
July		69.12 ^P	69.02	72.47	69.54
August		68.33 ^P	67.80	73.48	68.93
September		69.64 ^P	64.55	74.39	68.65
October		71.24 ^P	65.83	74.20	68.84
November		73.30 ^P	68.35	77.46	70.76
December		73.92 ^P	69.42	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 July would be expected to finish in January of 2004. 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 July is \$31.15 per pig. This represents a slight increase from last month, driven primarily by declining feedgrain prices. The mid point of the reported Iowa direct weaned pig transfer price remains below the calculated formula price. It is not surprising that cash transfer prices are averaging below the formula price given the equity losses that have been suffered in the hog industry over the past two years. Alternative budget projections and sensitivity tables are included to assess the impact of alternative weaned pig prices on break-even projections.

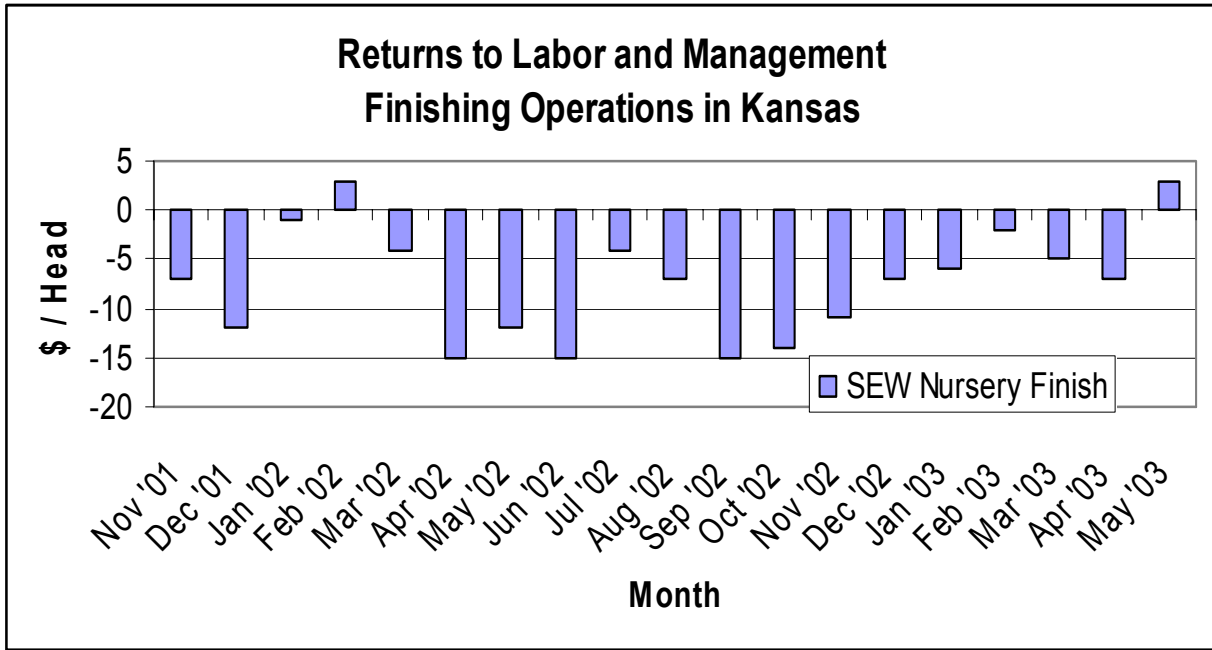
The projected sale price needed to cover all costs associated with finishing formula priced early weaned pigs started on feed in July is \$42.75 per cwt. on a live weight basis (around \$58 on a carcass basis), slightly lower than last month's projection. Pricing the weaned pig into the nursery-finish program at the mid-point of the recent Iowa reported cash transfer price (\$24.50) results in a projected break-even to cover all costs of \$39.79 per cwt. live ((\$53.75 carcass). Pigs placed in a nursery-finish program now are being placed against a futures based price forecast of around \$56 to \$57 per cwt. on a carcass basis.

The example hog finishing budgets are

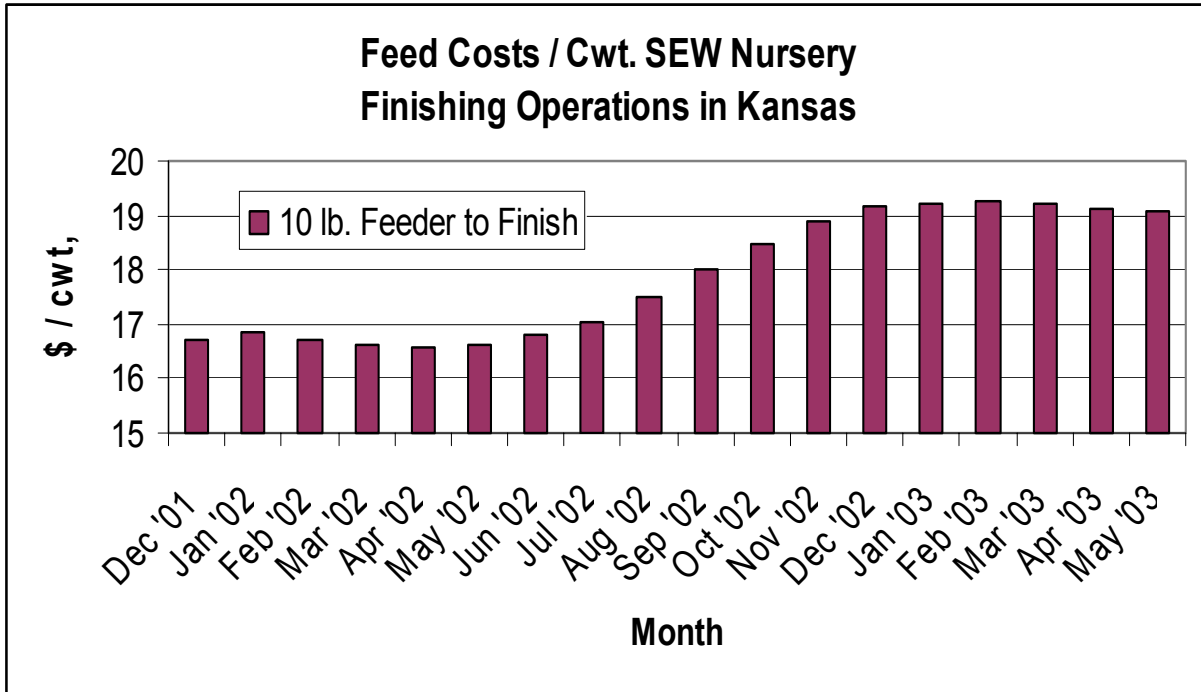
calculated using a milo based feeding ration. Projected feed costs, based on current milo and supplement prices, are currently at \$18.73 per cwt. of live pork produced in the SEW nursery finish program. This projection represents a decline of around 3% relative to projections of recent months. Feed 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. Overall feedgrain price levels, and near term price projections, have declined significantly over the past several weeks as it appears more likely that there will be a fairly large U.S. feedgrain crop. Basis levels in much of Kansas are strong as local feedgrain supplies have been drawn down due to drought conditions. If crop conditions continue to look favorable, basis levels should return to more normal levels as the fall crops begin to come in, presenting potential buying opportunities for feedgrain users.

Returns to labor and management averaged about \$3.06 per pig for hogs exiting Kansas SEW nursery-finish barns in May. Current calculations suggest that similar returns were earned in June, and positive returns to labor and management could average \$10.00 to \$15.00 per pig for the summer time frame. Break-evens to cover all costs are currently in the \$58 to \$61 range on a carcass basis, with selling prices expected to remain in the low \$60's.

Current prices, and short term futures based price forecasts, suggest that average and low costs producers at all levels of the pork production chain should be enjoying much needed positive returns, after an extended period of equity losses.



Source: KSU Swine Return Series.



Source: KSU Swine Return Series.

SEW NURSERY- FINISHING BUDGET
July, 2003

Assumptions	Barrows and Gilts
Initial weight of weaned pig	10 lbs.
Cost of weaned pig ¹	\$31.15
Interest rate	8.0 %
Feed conversion	3.00 lbs.
Death loss	5.00 %
Milo price	\$3.61 / cwt.
Soybean meal price	\$201.40 / ton.

¹ Weaned pig prices based on KSU formula.

COST BUDGET FOR FINISHING PIGS

FEEDER	
1. Cost of weaned pig	\$31.15
2. Interest on weaned pig	\$ 1.16
FEED	
3. Grain	\$18.07
4. Soybean meal	\$12.99
5. Vitamins and minerals	\$ 8.74
6. Starter	\$ 1.93
7. Interest on feed	\$ 0.78
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	\$37.61
Sale Price Needed to Cover Total Costs	\$42.75
Feed Cost Per Cwt. of Pork Produced	\$18.73

SEW Nursery-Finishing

Sensitivity Analysis of Break-even Sale Price

Feed Cost Per Cwt.	Purchase Price for 10 Lb. Weaned Pig				
	\$27.00	\$29.00	\$31.00	\$33.00	\$35.00
	Break-even Sale Price for Market Hog (\$/cwt. Live Basis)				
\$16.00	38.26	39.15	40.04	40.93	41.83
\$17.00	39.23	40.13	41.02	41.91	42.80
\$18.00	40.21	41.10	41.99	42.88	43.77
\$19.00	41.18	42.07	42.96	43.86	44.75
\$20.00	42.16	43.05	43.94	44.83	45.72
\$21.00	43.13	44.02	44.91	45.80	46.69
\$22.00	44.10	44.99	45.89	46.78	47.67

SEW Nursery-Finishing

Sensitivity Analysis of Maximum Weaned Pig Price

Feed Cost Per Cwt.	Expected Sale Price for Market Hogs (Live Basis)				
	\$38.00	\$40.00	\$42.00	\$44.00	\$46.00
	Maximum Purchase Price for 10 lb. Weaned Pig				
\$16.00	26.40	30.88	35.38	39.88	44.35
\$17.00	24.22	28.70	33.20	37.70	42.17
\$18.00	22.04	26.50	31.02	35.52	39.99
\$19.00	19.86	24.34	28.84	33.34	37.81
\$20.00	17.68	22.16	26.66	31.16	35.63
\$21.00	15.50	19.98	24.48	28.98	33.45
\$22.00	13.32	17.80	22.30	26.80	31.27