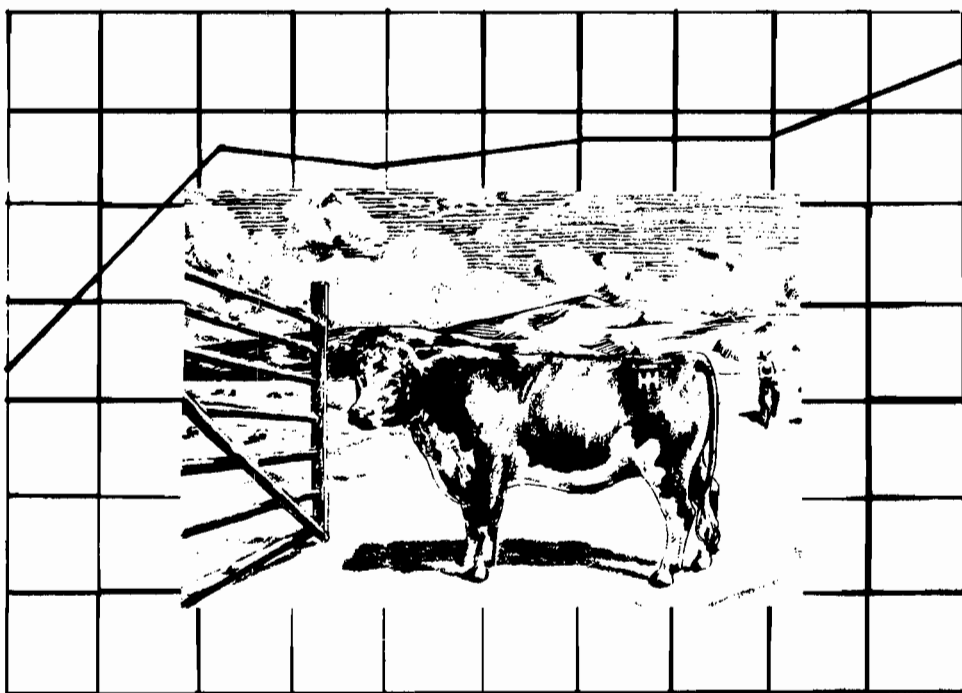


cattle BEEF PRODUCTION IN HUMBOLDT COUNTY

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UC Cooperative Extension

BEEF PRODUCTION IN HUMBOLDT COUNTY

by
John Dunbar, Farm Advisor and A. D. Reed, Extension Economist

This study presents sample investment, income and expense items on typical cattle operations in three areas of the county; southeastern, northeastern, and the Humboldt coast.

The county was divided into these areas on the basis of land capabilities, herd size, productive rate, and yearly operational cost. The information and figures for this study were established by a committee of cattlemen representing each production zone.

In this study, we have attempted to show how the total ranch investment, income and expense would be divided on an enterprise accounting system, and how the service enterprises (range*, horse and equipment) would be charged to the beef. This system shows the contribution to profit or loss that each resource makes towards the total ranch profit. This type of analysis can be used as a guide by an owner with 100 percent equity in a ranch, an individual considering the purchase of a ranch, or interested in rental or leasing.

This study also estimates approximate incomes attainable from three different cattle systems:

1. Cow herd selling weaners.
2. Cow herd selling yearlings.
3. Weaners to yearlings.

The study concludes with an analysis of consignment feeding. Tables illustrate comparable prices required to cover the purchase price, feed cost and other expense for light and heavy weight steers and heifers under various feeding programs.

* Range land investment and costs were taken from "Cost of Range Land-Humboldt County, California" by Farm Advisor D. W. Cooper & Phil Parsons, Extension Economist. 1967.

BEEF PRODUCTION IN SOUTHEASTERN HUMBOLDT

Based on the following -- 200 cow herd, 12 bulls, 85% calf crop, 4% mortality, 15% replacement

<u>INVESTMENT</u>	<u>TOTAL RANCH</u>	<u>BEEF</u>	<u>RANGE</u>	<u>HORSE</u>	<u>EQUIPMENT</u>
Range land, including fences	\$ 150,200		150,200		
Barns and corrals	9,800		9,800		
Trucks and tractors	11,800				11,800
Horses - 3 @ \$200 600	600			600	
Bulls - 12 @ \$250 3000)					
Cows - 200 @ \$150 30000)	39,000	39,000			
Heifers 60 @ \$100 6000)					
Total	\$ 211,400	\$ 39,000	\$160,000	\$ 600	\$ 11,800

<u>INCOME</u>					
Weaner steers - 85 @ 400 lbs. -- 34,000 lbs. @ 24¢	8,160	8,160			
Weaner heifers 55 @ 350 lbs. -- 19,250 lbs. @ 21¢	4,042	4,042			
Cull cows 22 @ 950 lbs. -- 20,900 lbs. @ 14¢	2,926	2,926			
Cull bulls 3 @ 1300 lbs. -- 3,900 lbs. @ 19¢	741	741			
Transfers to beef			9,600	698	3,052
Total	\$ 15,869	\$ 15,869	\$ 9,600	\$ 698	\$ 3,052

<u>EXPENSES:</u>					
Feed: Range 200 cows @ \$48		9,600			
Hay 100 tons @ \$38	3,800	3,290		510	
Salt	100	100			
Replacement bulls - 3 @ \$500	1,500	1,500			
Vet. and medicine	510	500		10	
Taxes	2,940	780	2,030	12	118
Horse expense		698			
Gasoline, oil, equipment repairs	1,200				1,200
Equipment		3,052			
Maintenance of fences, roads, corrals, and barns	976		976		
Insurance	600	150	250		200
Misc. overhead	1,450	720	700	30	
Depreciation	3,790		2,510	100	1,180
Family labor	4,800	4,800			
Interest	10,362	2,340	7,632	36	354
Total	\$ 32,028	\$27,530	\$14,098	\$ 698	\$ 3,052

MANAGEMENT INCOME \$-16,159 \$ -11,661 \$-4,498

Comparison of three alternative beef enterprises for a southeastern Humboldt ranch.

Item	A Cows to Weaners	B Cows to Yearling Feeders	C Calves to Yearling Feeders
<u>Investment</u>			
Rangeland, including fences	\$ 150,200	\$ 150,200	\$ 150,200
Barns and corrals	9,800	9,800	9,800
Truck and tractor	11,800	11,800	11,800
Horse	600	600	600
Livestock	<u>39,000</u>	<u>43,500</u>	<u>61,800</u>
Total	\$ 211,400	\$ 215,900	\$ 234,200
<u>Income</u>			
Weaner steers @ 24¢	8,160		
Weaner heifers @ 21¢	4,042		
Yearling feeder steers @ 21¢		9,282	80,945
Yearling feeder heifers @ 19¢		4,598	
Cull cows @ 14¢	2,926	2,394	
Cull bulls @ 19¢	741	494	
Less purchase price of calves @ \$25.50			<u>-63,036</u>
Total	\$ 15,869	\$ 16,768	\$ 17,909
<u>Expenses</u>			
Hay @ \$38/ton	3,800	3,800	5,700
Salt	100	100	100
Replacement bull	1,500	1,500	---
Vet., medicine	510	510	600
Taxes	2,940	3,030	3,396
Gasoline, oil, equipment repairs	1,200	1,200	1,200
Maintenance of fences	976	976	976
Insurance	600	600	600
Misc. overhead	1,450	1,450	1,450
Depreciation	3,790	3,790	3,790
Family labor	4,800	4,800	4,800
Hired labor			1,500
Interest	<u>10,362</u>	<u>10,603</u>	<u>11,730</u>
Total	\$ 32,028	\$ 32,359	\$ 35,842
MANAGEMENT INCOME	\$ -16,159	\$ -15,591	\$ -17,933

- A. 200 cow herd, 12 bulls, 85% calf crop, 4% mortality, 15% replacements, 85 steer calves sold @ 400#, 55 heifer calves @ 350#, 22 cows @ 950#, 3 bulls @ 1300#.
- B. 160 cow herd, 10 bulls, 85% calf crop, 4% mortality, 15% replacement, 68 yearling feeder steers @ 650#, 44 yearling heifers @ 550#, 18 cows @ 950#, 2 bulls @ 1300#.
- C. 618 calves purchased in October @ 400#, 4% mortality, 593 yearling steers sold @ 650# in July.

BEEF PRODUCTION IN NORTHEASTERN HUMBOLDT

Based on the following -- 300 cow herd, 18 bulls, 85% calf crop, 4% mortality, 15% replacement

<u>INVESTMENT</u>	<u>TOTAL RANCH</u>	<u>BEEF</u>	<u>RANGE</u>	<u>HORSE</u>	<u>EQUIPMENT</u>
Range land, including fences	\$ 218,700		218,700		
Barns and corrals	21,300		21,300		
Trucks and tractors	11,800				11,800
Horses - 3 @ \$200 600	600			600	
Bulls - 18 @ \$250 4500)					
Cows - 300 @ \$150 45000)	58,500	58,500			
Heifers 90 @ \$100 9000)					
Total	\$ 310,900	\$ 58,500	\$240,000	\$ 600	\$ 11,800
<u>INCOME</u>					
Weaner steers - 127 @ 400 lbs. -- 50,800 lbs. @ 24¢	12,192	12,192			
Weaner heifers 83 @ 350 lbs. -- 29,050 lbs. @ 21¢	6,101	6,101			
Cull cows 33 @ 950 lbs. -- 31,350 lbs. @ 14¢	4,389	4,389			
Cull bulls 5 @ 1300 lbs. -- 6,500 lbs. @ 19¢	1,235	1,235			
Transfers to beef			14,400	695	3,020
Total	\$ 23,917	\$ 23,917	\$14,400	\$ 695	\$ 3,020
<u>EXPENSES</u>					
Feed: Range 300 cows @ \$48		14,400			
Hay 150 tons @ \$38	5,700	5,190		510	
Salt	150	150			
Replacement bulls - 5 @ \$500	2,500	2,500			
Vet. and medicine	760	750		10	
Taxes	3,494	855	2,544	9	86
Horse expense		695			
Gasoline, oil, equipment repairs	1,200				1,200
Equipment		3,020			
Maintenance of fences, roads, corrals, and barns	1,224		1,224		
Insurance	600	150	250		200
Misc. overhead	1,800	870	900	30	
Depreciation	3,821		2,541	100	1,180
Family labor	4,800	4,800			
Interest	16,461	3,510	12,561	36	354
Total	\$ 42,510	\$ 36,890	\$20,020	\$ 695	\$ 3,020
MANAGEMENT INCOME	\$-18,593	\$-12,973	\$-5,620		

Comparison of three alternative beef enterprises for a northeastern Humboldt ranch.

Item	A Cows to Weaners	B Cows to Yearling Feeders	C Calves to Yearling Feeders
<u>Investment</u>			
Rangeland, including fences	\$ 218,700	\$ 218,700	\$ 218,700
Barns and corrals	21,300	21,300	21,300
Truck and tractor	11,800	11,800	11,800
Horse	600	600	600
Livestock	<u>58,500</u>	<u>63,750</u>	<u>92,700</u>
Total	\$ 310,900	\$ 316,150	\$ 345,100
<u>Income</u>			
Weaner steers @ 24¢	12,192		
Weaner heifers @ 21¢	6,101		
Yearling feeder steers @ 21¢		113,923	121,485
Yearling feeder heifers @ 19¢		6,897	
Cull cows @ 14¢	4,389	3,458	
Cull bulls @ 19¢	1,235	988	
Less purchase price of calves			<u>-94,554</u>
Total	\$ 23,917	\$ 25,266	\$ 26,931
<u>Expenses</u>			
Hay @ \$38/ton	5,700	5,700	6,600
Salt	150	150	150
Replacement bulls	2,500	2,500	---
Vet., medicine	760	750	750
Taxes	3,494	3,571	3,994
Gasoline, oil, equipment repairs	1,200	1,200	1,200
Maintenance of fences, etc.	1,224	1,224	1,224
Insurance	600	600	600
Misc. overhead	1,800	1,800	1,800
Depreciation	3,821	3,821	3,821
Family labor	4,800	4,800	4,800
Hired labor			1,500
Interest	<u>16,461</u>	<u>16,812</u>	<u>18,513</u>
Total	\$ 42,510	\$ 42,928	\$ 44,952
MANAGEMENT INCOME	\$ -18,593	\$ -17,662	\$ -18,021

A. 300 cow herd, 18 bulls, 85% calf crop, 4% mortality, 15% replacement, 127 steer calves sold @ 400#, 83 heifer calves @ 350#, 33 cows @ 950#, 5 bulls @ 1300#.

B. 240 cow herd, 15 bulls, 85% calf crop, 4% mortality, 15% replacement, 102 yearling feeder steers @ 650#, 66 yearling heifers @ 550#, 26 cows @ 950#, 4 bulls @ 1300#.

C. 927 calves purchased in October @ 400#, 4% mortality, 890 yearling steers sold @ 650# in July.

BEEF PRODUCTION ON THE HUMBOLDT COAST

Based on the following -- 300 cow herd, 12 bulls, 95% calf crop, 1% mortality, 12% replacement

<u>INVESTMENT</u>	<u>TOTAL RANCH</u>	<u>BEEF</u>	<u>RANGE</u>	<u>HORSE</u>	<u>EQUIPMENT</u>
Range land, including fences	210,900		210,900		
Barns and corrals	29,100		29,100		
Trucks and tractors	11,800				11,800
Horses - 3 @ \$200 600	600			600	
Bulls - 12 @ \$250 3000)					
Cows - 300 @ \$150 45000)	55,200	55,200			
Heifers 72 @ \$100 7200)					
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Total	\$307,600	\$ 55,200	\$240,000	\$ 600	\$ 11,800
 <u>INCOME</u>					
Weaner steers - 142 @ 500 lbs. -- 71,000 lbs. @ 24¢	17,040	17,040			
Weaner heifers 107 @ 450 lbs. -- 48,150 lbs. @ 21¢	10,112	10,112			
Cull cows 33 @ 1100 lbs. -- 36,300 lbs. @ 14¢	5,082	5,082			
Cull bulls 3 @ 1400 lbs. -- 4,200 lbs. @ 19¢	798	798			
Transfers to beef			14,400	696	3,035
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Total	\$ 33,032	\$ 33,032	\$ 14,400	\$ 696	\$ 3,035
 <u>EXPENSES</u>					
Feed: Range 300 cows @ \$48		14,400			
Hay 75 ton @ \$38	2,850	2,340		510	
Salt	150	150			
Replacement bulls - 3 @ \$500	1,500	1,500			
Vet. and medicine	760	750		10	
Taxes	4,367	959	3,297	10	1101
Horse expense		696			
Gasoline, oil, equipment repairs	1,200				1,200
Equipment		3,035			
Maintenance of fences, roads, corrals, and barns	1,248		1,248		
Insurance	625	150	275		200
Miscellaneous overhead	1,170	870	270	30	
Depreciation	2,780		1,500	100	1,180
Family labor	4,800	4,800			
Interest	16,809	3,348	13,071	36	354
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Total	\$ 38,259	\$ 32,998	\$ 19,661	\$ 696	\$ 3,035
 <u>MANAGEMENT INCOME</u>					
	\$ -5,227	\$ +34	\$ -5,261		

Comparison of three alternative beef enterprises on a Humboldt coast ranch.

Item	A Cows to Weaners	B Cows to Yearling Feeders	C Calves to Yearling Feeders
<u>Investment</u>			
Rangeland, including fences	\$ 210,900	\$ 210,900	\$ 210,900
Barns and corrals	29,100	29,100	29,100
Truck and tractor	11,800	11,800	11,800
Horse	600	600	600
Livestock	<u>55,200</u>	<u>64,200</u>	<u>92,700</u>
Total	\$ 307,600	\$ 316,600	\$ 345,100
<u>Income</u>			
Weaner steers @ 24¢	17,040		
Weaner heifers @ 21¢	10,112		
Yearling feeder steers @ 21¢		17,955	140,175
Yearling feeder heifers @ 19¢		10,498	
Cull cows @ 14¢	5,082	4,004	
Cull bulls @ 19¢	798	560	
Less purchase price of calves @ \$25.50			<u>-94,554</u>
Total	\$ 33,032	\$ 33,017	\$ 45,621
<u>Expenses</u>			
Hay @ \$38/ton	2,850	2,850	3,800
Salt	150	150	150
Replacement bull	1,500	1,000	---
Vet., medicine	760	760	760
Taxes	4,367	4,511	5,001
Gasoline, oil, equipment repairs	1,200	1,200	1,200
Maintenance of fences, etc.	1,248	1,248	1,248
Insurance	625	625	625
Misc. overhead	1,170	1,170	1,170
Depreciation	2,780	2,780	2,780
Family labor	4,800	4,800	4,800
Hired labor			1,500
Interest	<u>16,809</u>	<u>17,313</u>	<u>18,987</u>
Total	\$ 38,259	\$ 38,407	\$ 42,021
MANAGEMENT INCOME	\$ -5,227	\$ -6,103	\$ +3,600

- A. 300 cow herd, 12 bulls, 95% calf crop, 1% mortality, 12% replacements, 142 steer calves sold @ 500#, 107 heifer calves @ 450#, 33 cows @ 1100#, 3 bulls @ 1400#.
- B. 240 cow herd, 10 bulls, 95% calf crop, 1% mortality, 12% replacement, 114 yearling feeder steers @ 750#, 85 yearling heifers @ 650#, 26 cows @ 1100#, 2 bulls @ 1400#.
- C. 927 calves purchased in October @ 400#, 4% mortality, 890 yearling steers sold @ 750# in July.

CONSIGNMENT FEEDING STEERS

Steer calves at 400 lbs. fed to 1,000 lbs.

	<u>Total Cost</u>
Value of calf 400 lbs. @ 24¢	\$ 96.00
Transportation - 79¢/cwt. delivered to feed lot	
Shrink 10% - 360 lbs. @ 79¢	2.85
Feed and lot cost	
First 60 days, 1.5 lb./day gain 360-450 lbs.	
90 lbs. gain @ 16¢, 378 lb. TDN @ 3.81¢	14.40
Last 220 days 2.5 lb./day gain 450-1,000 lbs.	
550 lbs. gain @ 25¢, 2816 lb. TDN @ 4.88¢	137.50
Veterinary and medicine	1.00
Mortality 1%	.96
Taxes	2.50
Interest \$96 @ 6% for 280 days	<u>4.42</u>
Total Cost	\$ 259.63
Cost per lb. 1,000 - 5% shrink 950 lbs. net	\$ 27.33

Steer calves at 400 lbs. put on grass for 3 months,
then finished to 1,000 lbs.

Value of calf 400 lbs. @ 24¢	96.00
Transportation - 79¢/cwt. delivered to feed lot	
Shrink 10% 360 lbs. @ 79¢	2.85
Feed and lot cost	
Grass - 90 days, 1.0 lb./day gain, 360-450 lbs.	
90 lbs. gain @ 10¢, 477 lbs. TDN @ 1.89¢	9.00
Feed lot - 220 days, 2.5 lbs./day gain, 450-1,000	
550 lbs. gain @ 25¢, 2,816 lb. TDN @ 4.88¢	137.50
Veterinary and medicine	1.00
Mortality 1%	.96
Taxes	2.50
Interest \$96 @ 6% for 310 days	<u>4.90</u>
Total Cost	\$ 254.71
Cost per lb. 1,000 - 5% shrink 950 lbs. net	\$ 26.81

CONSIGNMENT FEEDING STEERS

Steer calves at 500 lbs. fed to 1,000 lbs.

	<u>Total Cost</u>
Value of calf 500 lbs. @ 24¢	\$ 120.00
Transportation - 79¢/cwt. delivered to feed lot	
Shrink 10% - 450 lbs. @ 79¢	3.56
Feed and lot cost	
220 days @ 2.5 lb./day gain	
550 lbs. gain @ 25¢, 2,816 lb. TDN @ 4.88¢	137.50
Veterinary and medicine	1.00
Mortality 1%	1.20
Taxes	2.50
Interest \$120 @ 6% for 220 days	<u>4.34</u>
Total Cost	\$ 270.10
Cost per lb. 1,000 lb. - 5% shrink 950 lbs. net	\$ 26.33

Steer calves at 500 lbs. fed 3 months on grass,
then finished to 1,000 lbs.

Value of calf 500 lbs. @ 24¢	120.00
Transportation 79¢/cwt. delivered to feed lot	
Shrink 10% 450 lbs. @ 79¢	3.56
Feed and lot cost	
Grass - 90 days 1.0 lb./day gain 450-540 lbs.	
90 lbs. gain @ 10¢, 567 lb. TDN @ 1.59¢	9.00
Feed lot - 184 days, 2.5 lb./day gain 540-1,000 lbs.	
460 lbs. gain @ 25¢, 2,337 lb. TDN @ 5.16	115.00
Veterinary and medicine	1.00
Mortality 1%	1.20
Taxes	2.50
Interest \$120 @ 6% for 274 days	<u>5.40</u>
Total Cost	\$ 257.66
Cost per lb. 1,000 - 5% shrink 950 lbs. net	\$ 27.12

CONSIGNMENT FEEDING HEIFERS

Heifer calves at 350 lbs. fed to 875 lbs.

	<u>Total Cost</u>
Value of calf 350 lbs. @ 21¢	\$ 73.50
Transportation 79¢/cwt. delivered to feed lot	
Shrink 10% 315 lbs. @ 79¢	2.50
Feed and lot costs	
First 60 days - 1.25 lb./day gain 315 to 390 lbs.	
75 lbs. gain @ 19¢, 336 lb. TDN @ 5.09¢	14.25
Last 216 days, 2.25 lb./day gain 390-875 lbs.	
485 lb. gain @ 28¢, 2,330 lb. TDN @ 5.82¢	135.80
Veterinary and medicine	1.00
Mortality 1%	.74
Taxes	2.50
Interest \$73.50 @ 6% for 276 days	<u>3.33</u>
Total Cost	\$ 233.62
Cost per lb. 875 - 5% shrink 830 lbs. net	\$ 28.15

Heifer calves at 350 lbs. put on grass for 3 months,
then finished to 875 lbs.

Value of calf 350 lbs. @ 21¢	\$ 73.50
Transportation 79¢/cwt. delivered to feed lot	
Shrink 10% 315 lbs. @ 79¢	2.50
Feed and lot costs	
Grass - 90 days - .75 lb. gain per day, 65 lb. gain	
65 lbs. @ 10¢ 396 lb. TDN @ 1.64¢	6.50
Last 220 days, 2.25 lb./day gain 380 to 875 lbs.	
495 lbs. gain @ 28¢, 2,354 lb. TDN @ 5.89¢	138.60
Veterinary and medicine	1.00
Mortality 1%	.74
Taxes	2.50
Interest \$73.50 @ 6% for 310 days	<u>3.75</u>
Total Cost	\$ 229.09
Cost per lb. 875 - 5% shrink 830 lbs. net	\$ 27.60

CONSIGNMENT FEEDING HEIFERS

Heifer calves at 450 lbs. fed to 875 lbs.

	<u>Total Cost</u>
Value of calf 450 lbs. @ 21¢	\$ 94.50
Transportation 79¢/cwt. delivered to feed lot	
Shrink 10% 405 lbs. @ 79¢	3.20
Feed and lot cost	
Fed 210 days, 2.25 lb./day gain 405 to 875 lbs.	
470 lbs. gain @ 28¢, 2,310 lbs. TDN @ 5.70¢	131.60
Veterinary and medicine	1.00
Mortality 1%	.94
Taxes	2.50
Interest 94.50 @ 6% for 210 days	<u>3.26</u>
Total Cost	\$ 237.00
Cost per lb. 875 - 5% shrink 830 lbs. net	\$ 28.60

Heifer calves 450 lbs. put on grass for 3 months,
then finished to 875 lbs.

Value of calf 450 lbs. @ 21¢	\$ 94.50
Transportation 79¢/cwt. delivered to feed lot	
Shrink 10% 405 lbs. @ 79¢	3.20
Feed and lot cost	
Grass 90 days @ .75 lb./day gain 405 to 470 lbs.	
65 lbs. @ 10¢ 648 lb. TDN @ 1.00¢	6.50
Fed 180 days @ 2.25 lb./day gain 470 to 875 lbs.	
405 lbs. gain @ 28¢ 2,052 lb. TDN @ 5.53¢	113.40
Veterinary and medicine	1.00
Mortality	.94
Taxes	2.50
Interest \$94.50 @ 6% for 270 days	<u>4.20</u>
Total Cost	\$ 226.24
Cost per lb. 875 - 5% shrink 830 lbs. net	\$ 27.30