UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

2005

SAMPLE COSTS FOR BEEF CATTLE YEARLING/STOCKER PRODUCTION

300 Head



SACRAMENTO VALLEY

(Northern Sacramento Valley)

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INTRODUCTION

The cattle industry in California has undergone dramatic changes in the last few decades. Ranchers have experienced increasing costs of production with a lack of corresponding increase in income. Issues such as international competition, new regulatory requirements, changing consumer demand, economies of scale, and competing land uses affect the economics of ranching. Rangeland makes up the largest percentage of acreage in the state. Cattle operations play an important part on California's environment and landscape. They need to be economically viable to maintain the current landscape.

Sample costs to raise beef cattle are presented in this study. This study is intended as a guide only, and can be used to make production decisions, determine potential returns, prepare budgets and evaluate production loans. Practices described are based on production practices considered typical for a beef cattle stocker-yearling operation, but will not apply to every situation. Sample costs for materials, equipment and custom services are based on current figures.

The hypothetical cattle operation, production practices, overhead, and calculations are described under the assumptions. For additional information or an explanation of the calculations used in the study call the Department of Agricultural and Resource Economics, University of California, Davis, (530) 752-3589 or your local UC Cooperative Extension office.

Sample Cost of Production Studies for many commodities can be downloaded at http://coststudies.ucdavis.edu, requested through the Department of Agricultural and Resource Economics, UC Davis, (530) 752-4424 or obtained from the local county UC Cooperative Extension offices. Some archived studies are also available on the website.

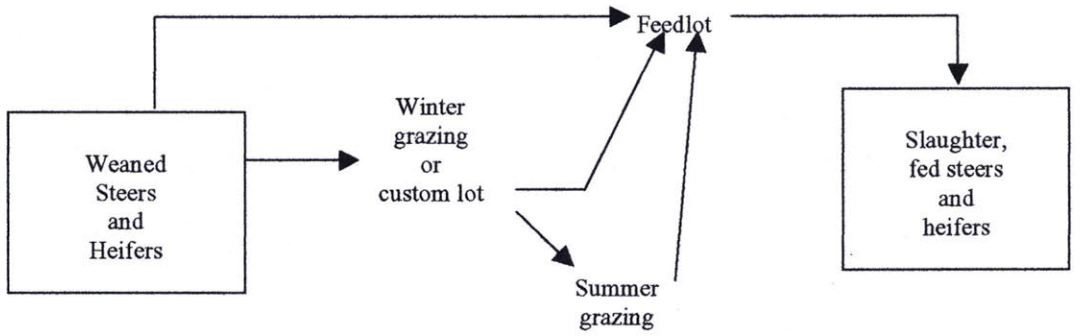
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ASSUMPTIONS

The assumptions refer to Tables 1 to 6 and pertain to sample costs to operate a beef cattle yearling/stocker operation. Practices described represent production practices and materials considered typical of a well-managed ranch in the northern Sacramento Valley. The costs, materials, and practices shown in this study will not apply to all situations. Production practices vary by grower and the differences can be significant. **The use of trade names and ranching practices in this report does not constitute an endorsement or recommendation by the University of California nor is any criticism implied by omission of other similar products or cultural practices.**

Cattle Operation. In California, cattle will typically pass through three phases while reaching market weight. These include the cow-calf operation, yearling/stocker phase and finishing or feedlot phase.

Figure 1.



- This cow-calf phase is from birth to weaning (cattle are typically weaned at 8-9 months weighing around 600 pounds.
- The yearling/stocker phase will take these weaned cattle and grow them out on grass to about 800-900 pounds (14-20 months).
- The feeding phase takes these yearlings off grass and places them in a feedlot for 90-120 days (or until they reach a desired finish weight).

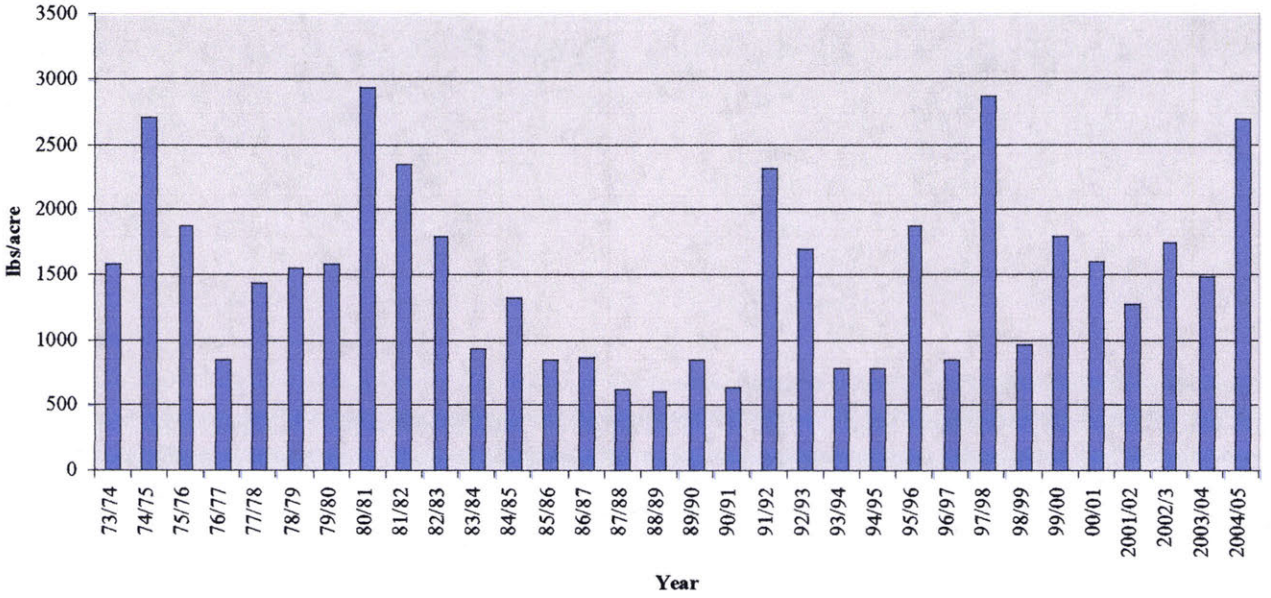
This study will focus on the yearling/stocker operation. For the purposes of this study, 530 pound steer calves will be discussed. Across California, cattle production techniques and management vary.

Stocker/yearling cattle can come from several sources. A cattle producer can keep the weaned calves or they can be purchased. Different time periods through out the calendar year can affect the availability of stocker cattle and may change the cost of purchase or income from sales.

This study focuses on stocker cattle that are retained or bought at weaning. It assumes that pasture is leased. It also assumes cattle will be sold or moved into a feedlot once they reach 800 pounds. The herd size is 300. The fixed costs will vary with the number of head involved or size of the operation.

Yearling/stocker operations are typically seasonal in California and primarily occur on rangeland where forage production is solely dependant upon seasonal rainfall. Figure 2 outlines the annual variability in forage production at a site in the northern Sacramento Valley - Shasta County. Producers must cope with stocking the ranches appropriately to manage this variation in forage production

Figure 2. Average Forage Production on Annual Range Near Redding, CA across 31 Years



In the Central and Sacramento Valleys, and the Coast Range of California, cattle are typically grazed from late autumn through late spring. Irrigated pasture and mountain ranges are generally grazed from late spring through mid autumn.

The goal of yearling/stocker cattle operations is to reduce the cost per pound of gain on heifers and steers. Average daily gain varies across the state. Depending upon location, producers might expect gains from 250 to 325 pounds per head for the season. Forage quality and quantity are the primary drivers in seasonal cattle gain. Secondarily, rate of gain may also be affected by health, body condition, mineral nutrition and the quality of the cattle.

Production Options

Producer Purchases Stockers or Retains Owned Stockers
(Table 1)

These two options can be treated the same in this cost study. If producers retain their own calves after weaning, they have forgone the opportunity to market them as calves and have effectively transferred them to a yearling enterprise. The fair market value of those calves must be assigned to the yearling/stocker enterprise to evaluate the profitability of the enterprise.

Most yearling operations turn out purchased weaned cattle on grass at the onset of the grazing season.

The market fluctuation during the grazing season represents significant risk for producers purchasing or retaining calves. Risk management may be facilitated through the use of options and futures. Consult qualified professionals when considering which risk management technique is the most appropriate for you. Many operations have done a great job on calf performance only to have the market move against them during the period that they own the calves. The feeder margin is the price per pound difference between the lighter weight

calves at purchase and the heavier weight calves at sale time. Receiving 15 cents less per pound is expected, based upon Western Video Auction sale averages from 1997-2003; if the market drops during the ownership period, all or any profit is quickly lost. Table A shows the price spread for six years on the Western Video Market price average for 500-600 pound steers compared to the price average of 800 pound steers during a six month ownership for both a winter rangeland and summer irrigated pasture operation.

One third of the time the market moved down below the normal feeder margins (resulting in margins of more than 15 cents) and price insurance would have been helpful. For example, the winter feeder margin n 2001-02 grew to 35.30 cents, resulting in an operating loss for the year. Table 6 illustrates the impact of market price shifts for winter grazing of purchased yearlings over the same period on the operation profitability.

Table A. Price Spread for Winter & Summer Operation

YEAR	FEEDER	YEAR	FEEDER
Winter	MARGIN	Summer	MARGIN
Oct to May	cents/lb	May to Oct	cents/lb
1997-1998	-24.80	1997	-15.30
1998-1999	-9.80	1998	-14.52
1999-2000	-8.48	1999	-7.02
2000-2001	-17.15	2000	-10.46
2001-2002	-35.30	2001	-18.82
2002-2003	-8.75	2002	-8.31
Average	-17.38	Average	-12.41

Feeder options can be used as a method to provide price insurance. Purchase of an option can be secured though a commodities broker and producers can choose the level of risk that they want to insure against. Some choose to buy the lowest cost option to provide cheap insurance against a large price swing. Others determine their breakeven costs and insure a price at or above that amount. Option prices generally cost from 1 to 5 cents per pound. Contracts are sold on a truckload or 44,000 pound lot. Larger operations use multiple purchases of calves over time (similar to dollar cost averaging in stocks) as a strategy to limit risk. Using a video auction to forward contract calves can also be used to reduce price risk. The fact that using yearly market price averages from 1997 to 1998 estimated a cash loss of $21,656 for the operation (shown in Table 6), clearly points out that this is an important management area that should not be overlooked to assure profitability or at least avert a financial disaster.

Producer Custom Grazes Stockers for Payment on Gain or Per Head

(Table 2)

In this scenario, a ranch lease holder grazes non-owned stockers and is paid on the body weight gain. Stockers usually will weigh between 500-600 pounds upon arrival.

In most contracts a 2% death loss is acceptable to the cattle owner. Missing cattle, not verified as dead, may be the responsibility of the lease holder. Any amount above that is the responsibility of the lease holder providing the pasture. Payment is based on a per pound of gain basis. Generally, the owner of the cattle provides medication and processing vaccine, and the lease holder provides the labor. The value for medication and vaccine ranges from 30 to 34 cents per pound of gain. This study assumes the producer will receive 30 cents per pound of gain. The shrink weight can be an important item of consideration. In most gain payment contracts, calves' weights are determined at the time of purchase and are generally shrunk. Cattle are gathered, weighed and shipped at the end of the grazing season. Shrink is generally figured at 3%. Net gain is calculated by subtracting the shrunk weight from the in weight. The quality of calves that are received can greatly vary the pounds of gain. Some producers have a contract clause allowing loads to be rejected on quality or health. We assume that the cattle will gain 270 pounds (or 1.5 pounds per day) during the grazing period.

Natural Production Costs
(Table 3)

There has been much interest to determine if there is an financial advantage to natural production (no implants, hormones, or antibiotics used in production) of stocker or yearling cattle. Previous studies showed that from 1997 to 2003, the average premium for natural calves weighing 500 to 625 pounds was 1.6 cents. We assumed that the 764 pound natural steers would sell at a 1.8 cent premium (Blank et. al 2006). Additional costs of operation are identifying any sick animals that require antibiotic treatment and selling them separately at an auction yard in a smaller lot that will bring a nine cent reduction in price per pound (Western Video Auction). It is estimated that not using implants and ionophores will reduce the animal gain by .084 to .30 and .11 to .18 pound of gain per day respectively (Fields and Taylor). Because the "natural" calves gained 36 pounds less than the conventional cattle, a three cent price differential was used. This price differential (generated by the lighter sale weight) coupled with the premium paid resulted in a higher price per pound for the natural cattle (Western Video Auction 2000 data).

Production Operating Costs

Operations. The Operations Calendar for a yearling/stocker operation is shown in Table B. The operations are affected by several factors such as weather and available feed. Therefore, depending upon the season, the operations will vary each year.

Table B. *Operations Calendar for Beef Weaned calves - Based on range & pasture (300 head, 2% calf mortality)

Month			Operation
November 1	to	May 30	Winter Range
November	to	December	Vaccination/Deworming
March			Deworming
May			Calves Sold

*Calendar will vary each year according to the season

Pasture, Hay and Supplements. This includes the market value of all feed (purchased or raised) that was used in the stocker operation. The assumption used in this study is that pasture is rented for $20/AUM (an AUM [animal unit month] is the equivalent to 1,000 lbs of forage on an air dry basis) over a six-month period. Animal Scientists generally consider calves from weaning to yearlings at 0.60 AUM, while yearlings are calculated 0.80 AUM. Some operations feed small amounts of hay when they receive or ship cattle. Hay may also be fed when weather conditions are not conducive to production of forage.

Some areas of California are deficient in micro and macro-nutrients. Consult your local veterinarian to learn about what might be deficient in your area. For Se, Cu, Zn and P a good reference by county is the UC Website http://animalscience.ucdavis.edu/Projects/MineralProject/.

Health, Veterinary, Medicine. Since the cattle have been in different environments, they potentially have been exposed to a variety of diseases. The most critical period of managing stockers is when the producer receives a new shipment of cattle at a new location, because of the higher risk of stress occurring. Good health and nutrition management during this critical period can greatly impact profitability. Cattle being received should be treated to reduce risk from parasites (external and internal) and disease. Consult your local veterinarian on the best program for your cattle. Cattle should be appropriately identified. Cattle will be gathered and processed again mid season. This study assumes a death loss of 2%.

Vehicle/Freight. Pickup business vehicle mileage is estimated at 3,000 miles per year and includes mileage while pulling the stock trailer. Estimated mileage for the stock trailer is 350 miles and the All Terrain Vehicle (ATV) 4-wheeler is 1,530 miles per year. Freight or trucking costs are commercial costs for hauling the cattle. The purchase of the calves requires transportation to the ranch, which costs $500 per load or $5 per head. The calves are sold by video auction and the terms require no transportation costs at the time of sale.

Repairs. Vehicle and equipment repairs are accounted for in the mileage rate allocated to each vehicle.

Labor. Most ranchers can no longer afford hired labor, but may use volunteer weekend help. Owner labor for hauling, turnout, gathering, feeding, fence repair, irrigation (when applicable), salting, checking calves, and moving pastures is also not included as a cost.

Marketing/Returns. The animals are marketed through a video market auction. This study uses the average price received from a six year (1997 to 2003) study of prices (Blank et. al 2006) to place a value at the beginning and end of the six month grazing season. To arrive at the feeder margin (difference in price of the calves at purchase and then at sale), the averages of 500 to 600 pound calves were subtracted from the following year's 800 pound steers to determine the average feeder margin during the period. Table 5 (Ranging Analysis) shows a range of returns for each of the operations – Purchased Yearlings, Gain, Natural - using a range of prices.

Interest on Operating Costs. Interest on operating costs is calculated on cash costs (calves purchased and operating costs) and is calculated at 2% annual interest (savings account rate) over a 6-month period.

Risk. Production risks should not be minimized. While this study makes every effort to model a production system based on typical, real world practices, it cannot fully represent financial and market risks, which affect profitability and economic viability.

Cash Overhead

Cash overhead consists of various cash expenses paid out during the year that are assigned to the whole farm and not to a particular operation. These costs include property taxes, interest on operating capital, office expense, liability and property insurance, equipment repairs, and management.

Insurance. Insurance for farm investments varies depending on the assets included and the amount of coverage.

Office Expense. Office and business expenses are estimated at $1,000 per year or $3.33 per head. These expenses include office supplies, telephones, bookkeeping, accounting, legal fees, utilities, and miscellaneous administrative charges.

Non-Cash Overhead
(Table 4)

Non-cash overhead is calculated as the capital recovery cost for equipment and other farm investments. Values in the table are for information only. The equipment capital recovery costs are included in the mileage costs shown in Tables 1 to 3.

Capital Recovery Costs. Capital recovery cost is the annual depreciation and interest costs for a capital investment. It is the amount of money required each year to recover the difference between the purchase price and salvage value (unrecovered capital). It is equivalent to the annual payment on a loan for the investment with the down payment equal to the discounted salvage value. This is a more complex method of calculating ownership costs than straight-line depreciation and opportunity costs, but more accurately represents the annual costs of ownership because it takes the time value of money into account (Boehlje and Eidman). The formula for the calculation of the annual capital recovery costs is ((Purchase Price – Salvage Value) x Capital Recovery Factor) + (Salvage Value x Interest Rate).

Salvage Value. Salvage value is an estimate of the remaining value of an investment at the end of its useful life. For farm machinery (tractors and implements) the remaining value is a percentage of the new cost of the investment (Boehlje and Eidman). For other investments including irrigation systems, buildings, and miscellaneous equipment, the value at the end of its useful life is zero. The purchase price and salvage value for equipment and investments are shown in the tables.

Interest Rate. The interest rate of 6.01% used to calculate capital recovery cost is the USDA-ERSs ten-year average of California's agricultural sector long-run rate of return to production assets from current income. It is used to reflect the long-term realized rate of return to these specialized resources.

Tack. Includes two saddles and related equipment (blanket, headgear, etc.).

Portable Cattle Working Facilities. Consists of portable loading chutes and portable corral panels. Depending upon the type and number of squeeze chutes and corral panels, the price will vary. An estimated price for livestock handling equipment required by a typical 300-stocker operation is used in this study.

Equipment. Farm equipment is purchased new or used, but the study shows the current purchase price for new equipment. Annual ownership costs for equipment and other investments are shown in the Equipment, Investment, and Business Overhead Costs table.

Table Values. Due to rounding, the totals may be slightly different from the sum of the components.

REFERENCES

Blank, Steven C., Hayley Boriss, Larry Forero and Glenn Nader. *Cattle Prices in Western Video Markets.* California Agriculture. March 2006.

Boehlje, Michael D. and Vernon R. Eidman. 1984. *Farm Management.* John Wiley and Sons. New York, NY

Fields, Thomas G., Robert W. Taylor. *Beef Production and Management Decisions.* 4th Edition. 2003. ISBN: 0130888796.

USDA-ERS. 2004. *Farm Sector: Farm Financial Ratios.* Agriculture and Rural Economics Division, ERS. USDA. Washington, DC http://www.ers.usda.gov/data/farmbalancesheet/fbsdmu.htm; Internet; accessed January 5, 2005.

Western Video Auction. Weekly Price Report for Shasta Livestock Auction September 2, 2005. www.wvmcattle.com/shastamr.htm

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Table 1. 300 HEAD OF PURCHASED YEARLINGS

Sacramento Valley -2005

Gross Income	**Number**	**Weight**	**Dollar Value**	**Gross Value**	***Per Calf**
Calves Purchased	300.00	530.00	1.20	190,800	636.00
Calves Sold	294.00	800.00	1.08	254,016	846.72
Gross Income (Calves Sold less Calves Purchased)				**63,216**	**210.72**
Operating Costs					
Pasture (leased-based upon seasonal $120/cow)				17,640	58.80
Purchased Feed :	**Tons**	**Cost/unit**			
Salt	3.00	230.00		690	2.30
Supplement	3.00	550.00		1,650	5.50
Hay	0.13	120.00		15	0.05
Veterinary/Medical			5,100.00	5,100	17.00
Transportation of cattle			1500.00	1,500	5.00
Truck Mileage	3,000.00	0.49	1,455.00	1,455	4.85
Stock trailer mileage	350.00	0.18	63.00	63	0.21
4 Wheeler mileage	1,530.00	0.20	306.00	306	1.02
Brand inspection			300.00	300	1.00
Checkoff (Marketing Order Promotion)			300.00	300	1.00
Marketing Costs Video or Auction fees			1,580.40	1,580	5.27
Horse costs - shoes, vet, & feed			309.00	309	1.03
Options (per cwt/based on out weight)		2.00	4,800.00	4,800	16.00
Total Cash Operating Costs				**35,708.40**	**119.03**
Income Above Cash Operating Costs				**27,507.60**	**91.69**
Ownership Costs					
Interest on Operating Costs (calves + operating cash)				2,265.08	7.55
Insurance (Vehicle, liability, ETC.)			1,500.00	1,500.00	5.00
Overhead (utilities, office costs, legal and accounting)			1,000.00	1,000.00	3.33
Total Overhead (Cash & Non-Cash Overhead)				**4,765.08**	**15.88**
Total Costs				**40,473.48**	**134.91**
Net Returns Above Total Costs (Returns to Land and Management)				**22,742.52**	**75.81**

*Based on 300 head. Note-The cost of labor and health insurance is not included

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Table 2. 300 HEAD OF YEARLINGS ON THE GAIN

Sacramento Valley 2005

Gross Income	Number	Weight Gain	Value	Gross Value	*Per Calf
Calf gain/pound	294.00	270.00	0.30	23,814.00	79.38
Operating Costs					
Pasture (leased-based upon seasonal $120/cow)				17,640.00	58.80
Purchased Feed :	**Tons**	**Cost/unit**			
Salt	3.00	230.00		690.00	2.30
Supplement	0.00	0.00		0.00	0.00
Hay	0.13	120.00		15.00	0.05
Veterinary/Medical		0.00			0.00
Transportation of cattle					0.00
Truck Mileage	3,000.00	0.49	1,455.00	1,455.00	4.85
Stock trailer mileage	350.00	0.18	63.00	63.00	0.21
4 Wheeler	1,530.00	0.20	306.00	306.00	1.02
Horse costs - shoes, vet, & feed			309.00	309.00	1.03
Total Operating Costs				**20,478.00**	**68.26**
Income Above Operating Costs				**3,336.00**	**11.12**
Ownership Costs					
Insurance (Vehicle, liability, ETC.)				1,500	5.00
Overhead (utilities, office costs, legal and accounting)				1,000	3.33
Total Overhead (Cash & Non-Cash Overhead)				**2,500.00**	**8.33**
Total Costs				**22,978.00**	**76.59**
Net Returns Above Total Costs (Returns to Land and Management)				**836.00**	**2.79**

*Based on 300 head. Note-The cost of labor and health insurance is not included.

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Table 3. 300 HEAD OF PURCHASED YEARLINGS - NATURAL

Sacramento Valley 2005

Gross Income				**Gross**	
	Number	**Weight**	**Value**	**Value**	**Per Calf**
Calves Purchased	300.00	530.00	1.20	190,800.00	636.00
Natural Calves Sold	289.00	764.00	1.13	249,057.89	830.19
Non Program Calves	5.00	764.00	1.00	3,820.00	12.73
Gross Income (Natural + Non Program less Purchased)				**62,077.89**	**206.93**
Operating Costs					
Pasture (leased-based upon seasonal $120/cow)				17,340.00	57.80
Purchased Feed :	**Tons**	**Cost/unit**			
Salt	3.00	230.00		690.00	2.30
Supplement	3.00	550.00		1,650.00	5.50
Hay	0.13	120.00		15.00	0.05
Veterinary/Medical			5,200.00	5,200.00	17.33
Transportation of cattle			1500.00	1500.00	5.00
Truck Mileage	3,000.00	0.49	1,455.00	1,455.00	4.85
Stock trailer mileage	350.00	0.18	63.00	63.00	0.21
4 Wheeler	1,530.00	0.20	306.00	306.00	1.02
Brand inspection			300.00	300.00	1.00
Checkoff (Marketing Order Promotion)			300.00	300.00	1.00
Marketing Costs Video or Auction fees			1,551.95	1,551.95	5.17
Horse costs - shoes, vet, & feed			309.00	309.00	1.03
Options (cwt on out weight)		2.00	4,800.00	4,800.00	16.00
Total Cash Operating Costs				**35,479.95**	**118.27**
Income Above Cash Operating Costs				**26,597.94**	**88.66**
Ownership Costs					
Interest on Operating Costs (calves + operating cash)				2,262.80	7.54
Insurance (Vehicle, liability, ETC.)			1,500.00	1,500.00	5.00
Overhead (utilities, office costs, legal and accounting)			1,000.00	1,000.00	3.33
Total Ownership Costs (Cash & Non-Cash Overhead)				**4,762.80**	**15.88**
Total Costs				**40,272.75**	**134.14**
Net Returns Above Total Costs (Net Returns to Land & Management)				**21,835.14**	**72.78**

*Based on 300 head. Note-The cost of labor and health insurance is not included.

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***Table 4. EQUIPMENT, INVESTMENT, AND BUSINESS OVERHEAD**

300 Head, Yearling/Stocker Operation

Sacramento Valley – 2005

	Purchase Price	Salvage/Cull Value	Livestock Share (%)	Useful Life (yr)	Annual Taxes and Insurance	Annual Capital Recovery
BUILDINGS, IMPROVEMENTS AND EQUIPMENT						
Gooseneck trailer	10,000.00	1,000.00	100	20	51.70	845.40
Saddles/Tack (2)	3,800.00	0.00	100	10	17.86	516.54
Portable Corals, Chutes, Panels	15,000.00	0.00	100	20	70.50	1,308.83
Total BUILDINGS, IMPROVEMENTS AND EQUIPMENT	**28,800.00**				**140.06**	**2,670.77**
PURCHASED LIVESTOCK						
Horses (2)	3400.00	1200.00	100	10		414.51
Total PURCHASED LIVESTOCK	**3400.00**					**414.51**
MACHINERY AND VEHICLES						
ATV	6,000.00	600.00	76.5	12	114.37	520.59
Pickup 4x4 3/4 ton	36,000.00	3,600.00	15	6	434.13	1,021.11
Total MACHINERY AND VEHICLES	**42,001.00**				**548.49**	**1,541.70**

*Information Only –Costs show in Tables 1-3 as cash costs

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Table 5. RETURNS ANALYSIS FOR 300 HEAD YEARLING/STOCKER PRODUCTION

Sacramento Valley - 2005

PURCHASED YEARLINGS

Operation	Number	Pounds	$/lb						
CALVES SOLD	294	800	0.78	0.88	0.98	1.08	1.18	1.28	1.38
Less Calves Purchased	300	530	1.20	1.20	1.20	1.20	1.20	1.20	1.20
GROSS INCOME (Sold minus Purchased)			-7,344	16,176	39,696	63,216	86,736	110,256	133,776
Total Cash Operating Costs			35,708	35,708	35,708	35,708	35,708	35,708	35,708
Total Cash Operating Costs/Calf	300		119	119	119	119	119	119	119
Total Income Above Cash Costs			-43,052	-19,532	3,988	27,508	51,028	74,548	98,068
Total Income Above Cash Costs/Calf	300		-144	-65	13	92	170	248	327
Total Overhead Costs			4,765	4,765	4,765	4,765	4,765	4,765	4,765
Total Overhead Costs/Calf	300		16	16	16	16	16	16	16
Total Costs			40,473	40,473	40,473	40,473	40,473	40,473	40,473
Total Costs/Calf	300		135	135	135	135	135	135	135
Total Net Income			-47,817	-24,297	-777	22,743	46,263	69,783	93,303
Total Net Income/Calf	300		-159	-81	-3	76	154	233	311

YEARLINGS ON THE GAIN

CALF Gain/Pound	294	270	0.15	0.20	0.25	0.30	0.35	0.40	0.45
GROSS INCOME			11,907	15,876	19,845	23,814	27,783	31,752	35,721
Total Cash Operating Costs			20,478	20,478	20,478	20,478	20,478	20,478	20,478
Total Cash Operating Costs/Calf	300		68	68	68	68	68	68	68
Total Income Above Cash Costs			-8,571	-4,602	-633	3,336	7,305	11,274	15,243
Total Income Above Cash Costs/Calf	300		-29	-15	-2	11	24	38	51
Total Overhead Costs			2,500	2,500	2,500	2,500	2,500	2,500	2,500
Total Overhead Costs/Calf	300		8	8	8	8	8	8	8
Total Costs			22,978	22,978	22,978	22,978	22,978	22,978	22,978
Total Costs/Calf	300		77	77	77	77	77	77	77
Total Net Income			-11,071	-7,102	-3,133	836	4,805	8,774	12,743
Total Net Income/Calf	300		-37	-24	-10	3	16	29	42

PURCHASED YEARLINGS - NATURAL

NATURAL CALVES SOLD	289	764	0.93	1.03	1.13	1.23	1.33	1.43	1.53
NON PROGRAM CALVES SOLD	5	764	0.50	0.75	1.00	1.25	1.50	1.75	2.00
Less Calves Purchased	300	530	1.20	1.20	1.20	1.20	1.20	1.20	1.20
GROSS INCOME (Sold minus Purchased)			16,450	39,485	62,078	85,554	108,589	131,623	154,658
Total Cash Operating Costs			35,480	35,480	35,480	35,480	35,480	35,480	35,480
Total Cash Operating Costs/Calf	300		118	118	118	118	118	118	118
Total Income Above Cash Costs			-19,030	4,005	26,598	50,074	73,109	96,143	119,178
Total Income Above Cash Costs/Calf	300		-63	13	89	167	244	320	397
Total Overhead Costs			4,763	4,763	4,763	4,763	4,763	4,763	4,763
Total Overhead Costs/Calf	300		16	16	16	16	16	16	16
Total Costs			40,243	40,243	40,243	40,243	40,243	40,243	40,243
Total Costs/Calf	300		134	134	134	134	134	134	134
Total Net Income			-23,792	-758	21,835	45,311	68,346	91,381	114,415
Total Net Income/Calf	300		-79	-3	73	151	228	305	381

UC COOPERATIVE EXTENSION

Table 6. IMPACT OF FEEDER MARGIN ON PROFITABILITY

SIX YEAR PRICE SPREAD COMPARISON 1997-98 THROUGH 2002-03 SEASONS

300 Head Operation

Sacramento Valley - 2005

PURCHASED YEARLINGS – WINTER RANGELAND STOCKERS

Operation	Number	Pounds	1998	1999	2000	2001	2002	2003
					$/Unit			
CALVES SOLD	294	800	0.7019	0.6721	0.8201	0.8222	0.6934	0.7723
Less Calves Purchased	300	530	0.9499	0.7701	0.9049	0.9937	1.0464	0.8595
GROSS INCOME (Sold-Purchased)			14,053	35,632	49,008	35,383	-3,290	44,984
Total Cash Operating Costs			35,708	35,708	35,708	35,708	35,708	35,708
Total Cash Operating Costs/Calf	300		119	119	119	119	119	119
Total Income Above Cash Costs			-21,656	-76	13,300	-325	-38,998	9,276
Total Income Above Cash Costs/Calf	300		-72	0	44	-1	-130	31
Total Overhead Costs			4,765	4,765	4,765	4,765	4,765	4,765
Total Overhead Costs/Calf	300		16	16	16	16	16	16
Total Costs			40,473	40,473	40,473	40,473	40,473	40,473
Total Costs/Calf	300		135	135	135	135	135	135
Total Net Income (loss)			-26,421	-4,841	8,535	-5,090	-43,763	4,511
Total Net Income (loss)/Calf	300		-88	-16	28	-17	-146	15