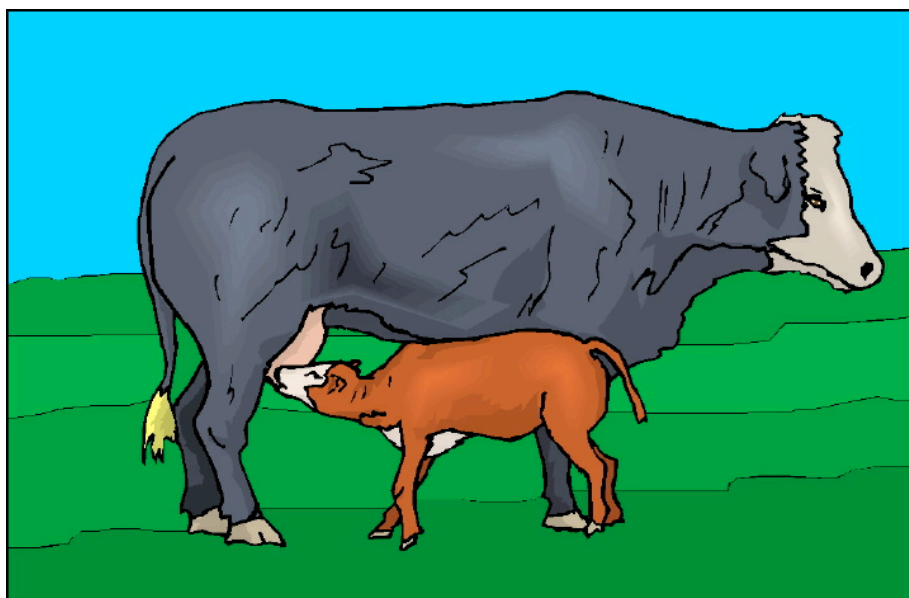


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UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION

2005

SAMPLE COSTS FOR AN  
**ORGANIC COW-CALF**  
OPERATION



**50 Head in the North Coast Region of  
Mendocino & Lake Counties**

John M. Harper  
Karen M. Klonsky

UC Cooperative Extension Farm Advisor, Mendocino and Lake Counties  
UC Cooperative Extension Specialist, Department of Agricultural and  
Resource Economics, UC Davis

Pete Livingston

Staff Research Associate, Department of Agricultural and Resource  
Economics, UC Davis

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## INTRODUCTION

While the sample costs to raise beef cattle organically in Mendocino and Lake Counties on the North Coast of California are presented in this study, the costs will be useful statewide for others interested in organic beef production. The ranch used in this study is for a 50 cow-calf herd that produces, slaughters, packages, and markets the final beef product. 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. Sample costs for labor, materials, equipment, and custom services are based on current figures. Practices described are based on those production procedures considered needed for beef cattle in this area, but may not apply in every situation. Some costs and practices presented in this study may not be applicable to your situation. A blank column, “*Your Costs*”, is provided in Table 1 to enter your costs.

In 2003, the U.S. Department of Agriculture’s Economic Reporting Service (ERS) published comprehensive data and analysis on organic crop and livestock production for the first time. Their findings revealed that organically raised beef and dairy cattle, sheep, hogs and pigs, laying hens, and broilers all exhibited strong growth between 1997 and 2001. This trend is continuing within California as well, and is for this reason that a sample costs for a 50 cow-calf herd was created

For an explanation of calculations used for the study refer to the attached Assumptions. For more information call Pete Livingston at the Department of Agricultural and Resource Economics, Cooperative Extension, University of California, Davis, California, 530-752-2414 or call UC Cooperative Extension Mendocino and Lake County Livestock and Natural Resources Advisor John M. Harper, 707-463-4495.

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 following assumptions pertain to sample costs to raise organic beef cattle in Mendocino and Lake Counties, California. Practices described are not necessarily recommendations by the University of California, but represent husbandry and production practices and materials considered typical of a well managed, organically raised herd. Some costs, practices, and materials may not be applicable to your situation or used during every year. Additional ones not indicated may be needed. Husbandry practices vary by ranchers and region and variations can be significant. These costs are on an annual, per acre basis. *The use of trade names 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.*

**Land.** The hypothetical ranch consists of 800 acres of land. Half of the land, 400 acres, is owned by the rancher and includes the irrigated pasture. The remainder of land is leased, private rangeland. Currently land adequate for grazing ranges from \$500 to \$3,000. An average price of \$1,050 is used for this study. Private range leased in this region varies from \$6 to \$18 per animal unit month (AUM) depending on the quality of the land. An AUM in this region for dryland range is 10 to 12 acres per cow. In this study the land has a lease price of \$12 per AUM per month and a total of 58.75 animals is assumed.

**Labor.** Labor rates of \$22.05 per hour for the owner/rancher and \$14.70 for general labor includes payroll overhead of 47%. The basic hourly wages are \$15.00 for the owner labor and \$10.00 for general labor. The overhead includes the employers' share of federal and California state payroll taxes, workers' compensation insurance for a stock operation (code 0038), and a percentage for other possible benefits. Workers' compensation insurance costs will vary among ranchers, but for this study the cost is based upon the average industry final rate as of January 1, 2005 (California Department of Insurance).

### COW-CALF HUSBANDRY PRACTICES AND MATERIAL INPUTS

**Cattle Herd.** The herd consists of 50 cows and 40 calves. During part of the year heifer and steer calves are sold except for seven replacement heifers that take the place of seven cows in the breeding herd. From the herd 10 heifers are bred and seven are kept as replacements; and 33 heifers and steers, and 1 culled cow are sold as organically raised. The ranch also has one bull to service the herd, and it is replaced every 6 years.

This is a winter/early spring calving operation. Cows and replacement heifers are bred in late winter through spring (February through April). An 85 percent conception rate and 95 percent birth rate are used (December to March). There is an eight percent death loss of heifers and bulls calves. Ten percent of the cows will be culled from the herd for various health reasons.

The cow-calf herd operates on a yearly basis. Steers and culled heifers are normally sold through commercial markets until a time that the entire operation goes organic beef. The 20 heifer calves are kept until 14 months of age at which time seven heifers are selected to be used for replacement cows and bred. Approximate dates for ranching operations are shown in Table A.

**Table A. Months of major operations.**

Operation	Month	To	Month
Winter Feeding	September	-	February
Pasture Feeding	March	-	August
Calving	September	-	November
Breeding	November	-	December
Weaning	June	-	July
Meat Sale <sup>§</sup>	Varies		

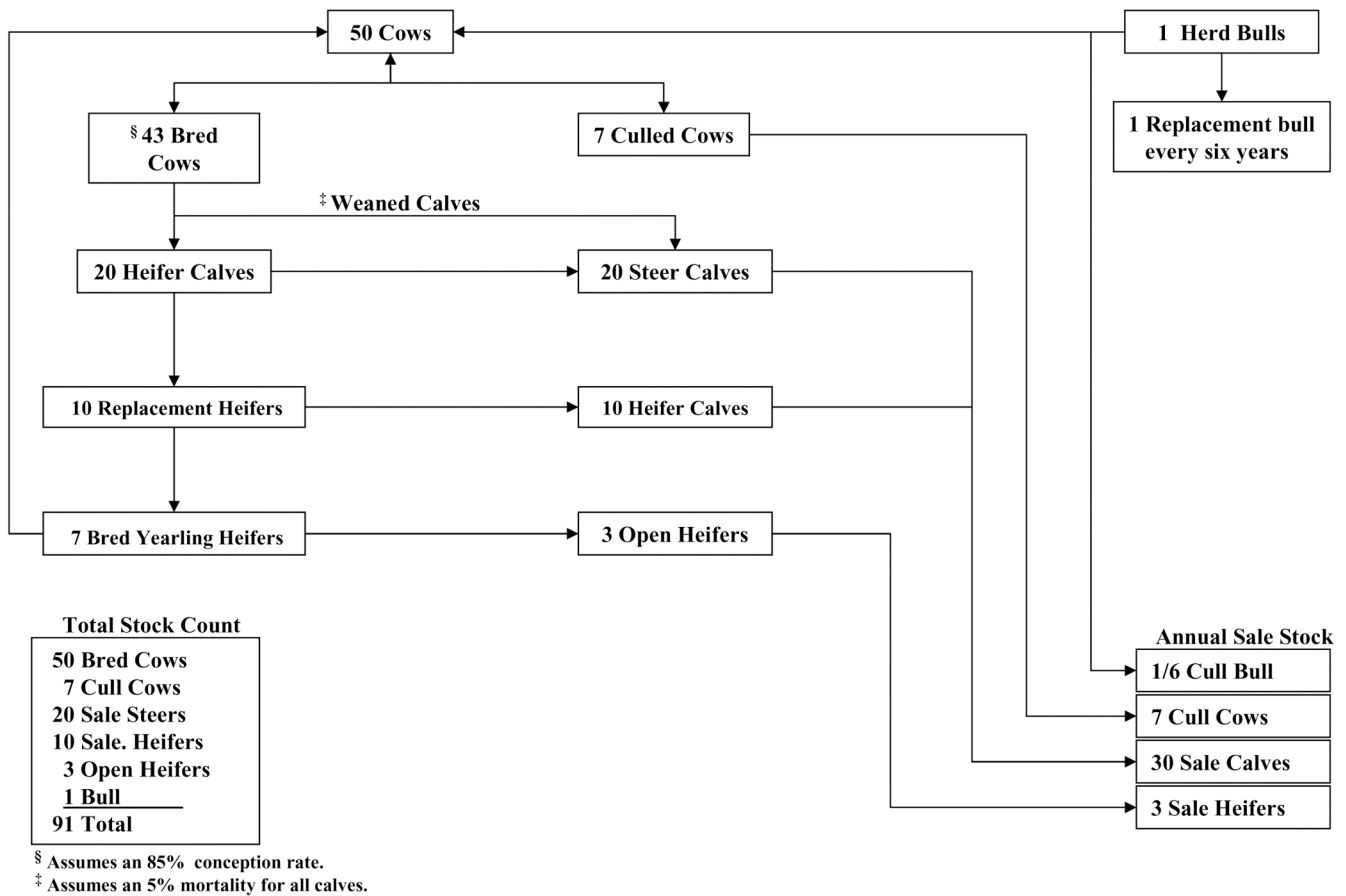
<sup>§</sup> For meat sale see Table B.

Organic beef standards and labeling are governed at the federal level by the United States Department of Agriculture's (USDA) applicable standards of the National Organics Program (NOP) and by the state of California by its Department of Food and Agriculture (CDFA) through the State Organics Program (SOP).

For commercial operators transitioning to an organic livestock production system the assumptions presented here are for a base 50 cow-calf herd with 33 heifers and steers and seven cows sold as organically raised. To become an organic beef operation a rancher must (1) meet the requirements of the NOP and SOP, (2) register with CDFA, and (3) be accredited by third party organic certification organization. In addition, a rancher selling meat in a retail store or market must have both the slaughter house and wrapping facilities that are certified organic by the USDA and meet any applicable other state or local laws or ordinances.

At calving time in the organic beef operation ~~the~~ all of the calves are raised to market weights. During this time the 20 heifers are scrutinized for suitability to move into the main cow herd for breeding. Out of those 10 seven are selected to be bred. Seven cows and three heifers are then culled and sold. A yearly cycle of the 50 organic cow-calf herd is shown in Chart 1.

Chart 1. An annual 50 organic cow-calf breeding cycle.



Adapted with permission from Larry Forero, Livestock and Natural Resources Advisor, University of California, Cooperative Extension, Shasta and Trinity Counties.

**Feed.** The pasture or range acreage needed for each cow is 10 to 12 acres per year. Pasture costs will vary depending on the location. Rented rangeland suitable for grazing varies from \$2 to \$8 per acre per year in Lake county. The herd is mainly range and pasture fed for most of the year.

The largest amount of labor hours expended is for feeding cows October through February. Feeding is required because of the lack of pasture forage or potential damage that cattle may cause pasture in wet conditions. It is assumed that during these wet months approximately 30 minutes per day or 15 hours of labor per month is required for feeding hay. During these months the whole cow herd is grazed in the range or pasture when feeding occurs. Animals will be fed an additional forage-based feed at a rate 1/2 to 3/4 tons per head annually.

Animals are also fed a mineral supplement/salt mixture to ensure they receive proper nutrition. It is assumed that cows need 2 ounces of mineral supplement per head per day.

The cattle are finished on organic grain in the ranch's feedlot for the final four months. They are usually placed in the feedlot at 590 to 700 pounds. Finished weights can vary, ranging from 1,000 to 1,200 pounds per animal depending on the starting weight and its average daily gain.

**Fencing.** The ranch has permanent and temporary fencing. The permanent fences are assumed to be in place on the rented rangeland. Maintenance of permanent fences on the leased land is included in the lease fee. Fences on the owned land are an improvement to the property, and landowners can depreciate this item.

Temporary fences are electric fences and are moved as needed. This helps to lower costs and the need for permanent fencing. The temporary fence is an investment, and a capital recovery cost is shown in various tables to account for its value.

The costs for labor to move cows will depend on the pasture design and the ability of ranchers to reach their herds. Most cattle herds are left alone within the confines of their range to find sufficient forage and water for their needs.

In this cost study the ranch has a combination of irrigated pasture and dryland range. In the early spring until the forage is gone cattle feed on the vegetation that is available on the dryland fields of the ranch. Irrigated pasture is cut for hay to meet some of the winter feed requirements. When the irrigated pastures are utilized as forage, an electric fence is used to move cattle. The herd is kept in the same paddock for five days and is then rotated to the next paddock. This allows the pasture time to regenerate feed for later use by the herd.

**Vaccination/Veterinarian Care.** All calves are given background shots as allowed under the organic protocols. This occurs during branding, weaning, and at anytime that animals are gathered. Animals are given routine vaccinations at a cost of \$4.50 per animal. Three hours of ranch labor is needed to help with the vaccinations and any other veterinarian care. Because there are no effective organically approved medicines for treating internal parasites in cattle, the herd is not treated. If an organically certified cow or calf gets internal parasites, it is usually treated with a non-organically approved medication, removed or tagged to separate it from the organic herd, and sold as conventionally raised beef.

Heifers that are not going to be replacement cows for the herd are spayed to prevent any breeding. Male cattle are castrated to also stop any unwanted breeding within the herd. Brucellosis is treated in all of the female calves.

## TRANSPORTATION, SALES AND RETURNS, MARKETING, AND ORGANIC CERTIFICATION

**Transportation Cost.** Live animals are shipped by the rancher’s own truck and trailer to the Sacramento Valley for slaughtering, cutting, and wrapping in a USDA inspected and certified plant that is also certified as an organic processor. Transportation costs are paid by the rancher and are included in the price paid by the buyer. The amount of the hauling cost in the final meat price will depend on shipping expense and how the meat is sold. It is assumed to take roughly eight hours of labor roundtrip to transport animals for slaughter, cutting, and wrapping.

**Sales and Returns.** Because the animals are processed into various cuts of meats sold either directly to the consumer or retailer there can be different prices in the marketplace. The prices and weights listed in Table B are used in this cost study based on the best data available. Prices and weights will be variable depending upon many different factors and can change over time.

Commercial, organically-raised heifer and steer calves are sold at about 18 to 24 months of age at 1,000 to 1,200 pounds, depending on feed and growth for the year. Heifers, steers, and culls are shipped for slaughtering and butchering once they reach proper weight. This study assumes that the heifers and steers in this study are brought to 1,100 pound weight at the time of slaughter, culled cows and open heifers are processed at 1,400 pounds of live weight, and every six years the bull is butchered at 1,800 pounds. It is also assumed that carcass weight of the 1,100 pound calves is 62% (682 pounds) of the live weight, and retail cuts are 75% (512 pounds) of the carcass weight. Fat and bones make up the rest of the carcass weight (170 pounds). Ten pounds of soup bones are included in the weight of the carcass for a total 522 pounds of retail cuts. Processing the animals takes place in the Sacramento Valley. A plant there is USDA approved and organically certified to handle the animals. While this requires transportation of the animals, shrinkage does not cause a significant weight loss of the animals.

**Table B. Weights & Prices of Organic Meat Cuts from a 1,100 Lb Animal**

Meat Cut	Average Weight	Average Lbs of Cut/Animal	Price Per Lb
Fillet (Beef Tenderloin)	0.84	10	\$20.00
Top Sirloin	2.09	67	\$10.50
Rib Eye Steak – Boneless	1.00	48	\$12.00
Swiss Steak	1.08	10	\$8.50
Stir Fry	1.00	15	\$6.50
Stew Meat	1.78	26	\$6.50
Tri Tip	1.06	25	\$12.00
Sirloin Tip Roast	3.91	15	\$9.50
Bone Chuck Roast	2.31	60	\$8.25
London Broil	1.62	12	\$8.25
X Rib Roast	2.93	25	\$8.75
Eye of the Round Roast	1.68	12	\$8.50
Pot Roast	1.30	12	\$7.50
Beef Ribs	2.41	30	\$8.25
Short Ribs	1.28	21	\$6.50
Heart	2.34	2	\$5.00
Beef Bones	2.50	10	\$1.00
Ground Beef	1.00	122	\$5.00

Prices are quite variable depending on factors such as the type of cut of meat sold, timing, markets, or demand. Table B shows the prices for the organically raised beef cuts used in this study. Prices used in this study are an estimate and meant only to give an idea of potential positive or negative returns.

**Marketing.** The ranches that were studied used two types of marketing: direct consumer sales and sales to a retail store. Neither of these marketing channels are explored in depth in this cost study because markets for organic beef are still developing and do not have a standard or normal sales conduit. However, in an organic beef operation marketing costs must be taken into consideration as part of doing business, unless the cattle are sold at the farm gate directly to a processor. Ranchers need to explore markets and sales to find the best practice for their operation. This may mean using several sales strategies to achieve profitability and economic sustainability.

One source for additional information on marketing cattle from a rancher's perspective can be found on the internet at <http://sarep.ucdavis.edu/grants/Reports/nader/>. Four case studies of the ranchers' sales strategies are presented as well as a prospective business and marketing plan. The report also cites other sources for marketing, labeling, standards, taste and sensory testing. The report may be helpful to anyone wanting to start specialty niche beef marketing by providing information of what has already been done.

*Packaging & Labeling.* All meat cuts are hermetically sealed at butchering, labeled, and frozen to improve shelf life as well as shipping. Both the packaging and labeling are paid for by the rancher. Ranchers provide the labels, at their own expense, to the butcher. Ranchers selling their cuts, either directly or retail, have freezer storage on their ranch in order to hold meat as long as needed.

Having a well presented USDA certified organic label can help a rancher differentiate their product as markets become increasingly competitive, but the regulation and time necessary for approval of a label requires an early start with the process. The Food Safety Inspection Service (FSIS) is the entity within the USDA that has the responsibility for approving any label on meat packages sold. The process for having an USDA certified label is discussed in more detail, and forms are available at the FSIS internet site <http://www.fsis.usda.gov/home/index.asp>. Contact FSIS for more information on label standards.

**Organic Certification.** Both the USDA and CDFA have jurisdiction over organic certification. Within the USDA is the National Organic Standards Board (NOSB) that officially approves all of the acceptable organic materials that can be used for certified organic production practices. The USDA accredits all international, state, and private certifying organizations. At the state level the CDFA also must approve the third-party organizations that certify a commodity raised by a grower or rancher as meeting organic standards. A comprehensive description including rules for organic crop and livestock production, certifying organizations, approved materials, marketing, and contact information is the *Organic Farming Compliance Handbook; A Resource Guide for Western Region Agricultural Professionals* and can be referred to help ranchers conform with organic standards. The complete organic compliance handbook can be found and viewed on the internet at [www.sarep.ucdavis.edu/organic/complianceguide/organizations.htm](http://www.sarep.ucdavis.edu/organic/complianceguide/organizations.htm).

The ranch in this study is assumed to have already transitioned to meet organic standards. Ranchers and growers registered as organic producers must pay annual fees to various agencies. There are different annual fees for certification, membership, sales, and assessments depending on the organizations that a rancher uses. This study uses an estimate of \$1,000 for the annual certification, registration, and inspection process.

**Risk.** The risks associated with an organically certified 50-head cow-calf operation and producing and marketing certified organic, USDA labeled, beef are significant. While this study makes every effort to model a production system based on typical, real world practices; it cannot fully represent financial, agronomic, animal husbandry, and market risks which affect the profitability and economic viability of a

cow-calf or certified organic beef operation. Additionally, ranchers need to consider the transition period from regular to organic production, approved labeling, and the availability of certified USDA and organic processing facilities. A market channel must be determined before starting either a cow-calf operation or an organically certified beef program.

## CASH OVERHEAD COSTS

**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, management services, and equipment repairs.

*Property Taxes.* Counties charge a base property tax rate of 1% on the assessed value of the property. In some counties special assessment districts exist and charge additional taxes on property including equipment, buildings, and improvements. For this study, county taxes are calculated as 1% of the average value of the property. Average value equals new cost plus salvage value divided by 2 on a per acre basis.

*Interest On Operating Capital.* Interest on operating capital is based on cash operating costs and is calculated monthly until harvest at a nominal rate of 6.89% per year. A nominal interest rate is the typical rate for borrowed funds.

*Management.* Wages for management are not included in this study. Any return above total costs is considered a return to management.

*Insurance.* Insurance for farm investments vary depending on the assets included and the amount of coverage. Property insurance provides coverage for property loss and is charged at 0.690% of the average value of the assets over their useful life. Liability insurance covers accidents on the farm and costs \$516 for the farm.

*Office Expense.* Office and business expenses are estimated at \$5,000 annually. These expenses include office supplies, telephones, bookkeeping, accounting, legal fees, etc.

**Equipment Costs.** Equipment costs are composed of three parts: non-cash overhead, cash overhead, and operating costs. Both of the overhead factors have been discussed in previous sections. The operating costs consist of fuel, lubrication, and repairs.

*Repairs, Fuel and Lube.* Repair costs are based on purchase price, annual hours of use, total hours of life, and repair coefficients formulated by the American Society of Agricultural Engineers (ASAE). Fuel and lubrication costs are also determined by ASAE equations based on maximum PTO hp, and type of fuel used. Prices for on-farm delivery of diesel and gasoline are \$1.51 and \$2.05 per gallon, respectively.



## NON-CASH OVERHEAD COSTS

The cost calculations are based on economic principles that include all cash costs. This analysis has used a rental value of the acres as a cost of operation. For this reason land taxes, fence and building depreciation, and land value are not considered in the costs.

**Capital Recovery Costs.** Although farm equipment on a stock farm in the region might be purchased new or used, this study shows the current purchase price for new equipment. The new purchase price is adjusted to 60% to indicate a mix of new and used equipment. Annual ownership costs for equipment and other investments are shown in the various tables. They represent the capital recovery cost for investments on an annual per acre basis.

Capital recovery cost is the amount of money required each year to recover the difference between the purchase price and salvage value (unrecovered capital). Put another way, 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 accurately represents annual costs of ownership because it takes the time value of money into account (Boehlje and Eidman). Annual capital recovery costs are calculated as follows:

$$\left[ \left( \frac{\text{Purchase Price} - \text{Salvage Value}}{\text{Price Value}} \right) \times \left( \frac{\text{Capital Recovery}}{\text{Factor}} \right) \right] + \left[ \frac{\text{Salvage Value} \times \text{Interest Rate}}{\text{Value Rate}} \right]$$

*Salvage Value.* Salvage value is an estimate of the remaining value of an investment at the end of its useful life. For farm machinery (e.g., tractors and implements) the remaining value is a percentage of the new cost of the investment (Boehlje and Eidman). The percent remaining value is calculated from equations developed by the American Society of Agricultural Engineers (ASAE) based on equipment type and years of life. The life in years is estimated by dividing the wearout life, as given by ASAE by the annual hours of use in this operation. For other investments including irrigation systems, buildings, and miscellaneous equipment, the value at the end of its useful life is zero.

*Capital Recovery Factor.* Capital recovery factor is the amortization factor or annual payment whose present value at compound interest is 1. The amortization factor is a table value that corresponds to the interest rate and the life of the equipment.

*Interest Rate.* The interest rate of 6.01% used to calculate capital recovery cost is the USDA-ERS's 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 that can only be used effectively in the agricultural sector. In other words, the next best alternative use for these resources is in another agricultural enterprise.

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

**Acknowledgment.** Assistance provided by local producers was greatly appreciated.

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Table 1.

UC COOPERATIVE EXTENSION  
 COSTS PER HEAD TO MAINTAIN A 50 COW-CALF ORGANIC OPERATION  
 NORTH COAST - MENDOCINO AND LAKE COUNTIES  
 2005

	Weight Each (Retail Cuts)	Unit	Total Number of Head or Units	Price or Cost/Unit (Retail Cuts)	Total Value	Value or Cost/Head	Your Value
<b>GROSS RECEIPTS</b>							
Heifer Calves	522	Lbs	13	8.50	57,681	1,153.62	
Steer Calves	522	Lbs	20	8.50	88,740	1,774.80	
Cull Cows	664	Lbs	7	8.50	39,508	790.16	
Cull Bull	142	Lbs	0.17	8.50	1,207	205.19	
Cull Sale Replacement Heifers	664	Lbs	3	8.50	16,932	338.64	
<b>Total RECEIPTS</b>				<b>8.50</b>	<b>204,068</b>	<b>4,262</b>	
<b>OPERATING COSTS</b>							
Mineral Supplement/Salt		Lbs	2,520	0.30	756	15.12	
Alfalfa Hay		Lbs	67,940	0.05	3,397	67.94	
Grain		Lbs	17,208	2.55	43,880	877.61	
Miscellaneous		Head	91	5.00	455	9.10	
Checkoff/Brand Inspection		Head	91	3.50	319	6.37	
Slaughter		Head	40	66.00	2,640	52.80	
Butcher (Cut, Wrap, & Label)		Pound	20,967	0.62	13,000	259.99	
Transportation		Trip	10	631.80	6,318	126.36	
Organic Certification		Ranch	1	1,000.00	1,000	20.00	
State Organic Fee		Ranch	1	300.00	300	6.00	
USDA Organic Approved Labels		Each	12,180	0.40	4,872	97.44	
Hired Labor		Hour	120	15.00	1,800	36.00	
Owner Labor		Hour	2,250	22.05	49,613	992.25	
Veterinary Medicine	\$		755	1.00	755	15.09	
Machinery (Fuel, Oil, Lube & Repair)	\$		1,698	1.00	1,698	33.96	
Vehicles (Fuel, Oil, & Repair)	\$		4,227	1.00	4,227	84.54	
Equipment (Repair)	\$		232	1.00	232	4.63	
Housing and Improvements (Repair)	\$		481	1.00	481	9.61	
Interest on Operating Capital	\$		53,394	0.08	4,085	81.69	
<b>Total OPERATING COSTS</b>					<b>139,825</b>	<b>2,796.50</b>	
<b>INCOME ABOVE OPERATING COSTS</b>					<b>64,243</b>	<b>1,465.91</b>	
<b>CASH OVERHEAD COSTS</b>							
Taxes and Insurance					10,445	208.90	
Overhead					18,460	369.20	
<b>Total CASH OVERHEAD COSTS</b>					<b>28,905</b>	<b>578.10</b>	
<b>NON-CASH OVERHEAD COSTS</b>							
Capital Recovery					31,947	638.95	
Interest on Retained Livestock					1,497	29.93	
<b>Total NON-CASH OVERHEAD COSTS</b>					33,444	668.88	
<b>Total COSTS</b>					<b>202,174</b>	<b>4,043.48</b>	
<b>Returns to Risk and Management</b>					<b>1,894</b>	<b>218.93</b>	

Table 2.

UC COOPERATIVE EXTENSION  
MONTHLY SUMMARY OF CASH RETURNS AND EXPENSES TO MAINTAIN A 50 COW-CALF ORGANIC OPERATION  
NORTH COAST - MENDOCINO AND LAKE COUNTIES  
2005

	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
<b>PRODUCTION</b>													
Heifer Calves	17,748	22,185	0	0	0	0	0	0	0	0	0	17,748	57,681
Steer Calves	0	0	26,622	31,059	31,059	0	0	0	0	0	0	0	88,740
Cull Cows	0	0	0	0	0	22,576	5,644	11,288	0	0	0	0	39,508
Cull Bull	0	0	0	0	0	0	0	0	202	0	0	0	202
Cull Sale Replacement Heifers	0	5,644	11,288	0	0	0	0	0	0	0	0	0	16,932
<b>Total RECEIPTS</b>	<b>17,748</b>	<b>27,829</b>	<b>37,910</b>	<b>31,059</b>	<b>31,059</b>	<b>22,576</b>	<b>5,644</b>	<b>11,288</b>	<b>202</b>	<b>0</b>	<b>0</b>	<b>17,748</b>	<b>203,063</b>
<b>OPERATING INPUTS</b>													
Mineral Supplement/Salt	69	69	69	57	57	57	57	57	57	69	69	69	756
Alfalfa Hay	602	602	548	548	548	548	0	0	0	0	0	0	3,397
Grain	3,669	3,669	3,669	3,669	3,669	3,669	3,644	3,644	3,644	3,644	3,644	3,644	43,880
Miscellaneous	45	40	40	40	40	35	35	35	35	35	35	40	455
Checkoff/Brand inspection	0	0	0	0	0	0	0	0	0	0	319	0	319
Slaughter	198	264	396	462	462	330	132	198	0	0	0	198	2,640
Butcher (Cut, Wrap, & Label)	971	1,295	1,942	2,265	2,265	1,618	647	971	54	0	0	971	13,000
Transportation	632	632	632	632	632	632	632	632	632	0	0	632	6,318
Organic Certification	0	0	0	0	1,000	0	0	0	0	0	0	0	1,000
State Organic Fee	0	0	0	0	300	0	0	0	0	0	0	0	300
USDA Organic Approved Labels	360	480	720	840	840	600	240	360	72	0	0	360	4,872
Veterinary Medicine	0	455	0	300	0	0	0	0	0	0	0	0	755
Machinery (Fuel, Oil, Lube, Repair)	517	142	142	142	142	142	19	19	9	9	19	393	1,698
Vehicles (Fuel and Repair)	818	817	259	259	259	259	259	259	259	259	259	259	4,227
Equipment (Repair)	0	0	0	0	116	116	0	0	0	0	0	0	232
Housing, Improvements (Repair)	48	48	48	0	0	48	48	48	48	48	48	48	481
Taxes and Insurance	0	0	0	1,513	0	0	0	0	0	1,513	4,307	0	7,333
Hired Labor	0	0	0	0	0	0	300	300	300	300	300	300	1,800
Owner Labor	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134	4,134
Interest on Operating Expenses	51	105	159	227	293	344	383	424	457	494	552	596	4,085
<b>Total Costs</b>	<b>12,114</b>	<b>12,751</b>	<b>12,759</b>	<b>15,091</b>	<b>14,759</b>	<b>12,534</b>	<b>10,531</b>	<b>11,082</b>	<b>9,702</b>	<b>10,506</b>	<b>13,685</b>	<b>11,644</b>	<b>101,680</b>
<b>Returns over Operating Costs</b>	<b>5,634</b>	<b>15,078</b>	<b>25,151</b>	<b>15,968</b>	<b>16,300</b>	<b>10,042</b>	<b>-4,887</b>	<b>206</b>	<b>-9,501</b>	<b>-10,506</b>	<b>-13,685</b>	<b>6,104</b>	<b>101,382</b>
<b>CASH OVERHEAD COSTS</b>													
Interest on Operating Expenses	48	101	151	212	273	321	357	397	430	465	518	560	3,834
Taxes and Insurance	870	870	870	870	870	870	870	870	870	870	870	870	10,445
Overhead	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538	1,538	18,460
<b>Total CASH OVERHEAD COSTS</b>	<b>2,457</b>	<b>2,510</b>	<b>2,560</b>	<b>2,621</b>	<b>2,682</b>	<b>2,730</b>	<b>2,766</b>	<b>2,806</b>	<b>2,839</b>	<b>2,874</b>	<b>2,927</b>	<b>2,969</b>	<b>32,739</b>
<b>Returns over Cash Costs</b>	<b>9,657</b>	<b>10,242</b>	<b>10,199</b>	<b>12,470</b>	<b>12,077</b>	<b>9,805</b>	<b>7,765</b>	<b>8,276</b>	<b>6,863</b>	<b>7,632</b>	<b>10,759</b>	<b>8,675</b>	<b>68,941</b>

Table 3.

UC COOPERATIVE EXTENSION  
 INVESTMENT SUMMARY OF MAINTAINING A 50 COW-CALF ORGANIC OPERATION  
 NORTH COAST - MENDOCINO AND LAKE COUNTIES  
 2005

	Purchase Price <sup>§</sup>	Salvage/Cull Value <sup>‡</sup>	Livestock Share (%)	Useful Life (yr)	Annual Taxes and Insurance	Annual Capital Recovery
<b>BUILDINGS, IMPROVEMENTS AND EQUIPMENT</b>						
Fencing	10,000	1,000	60	30	56	429
Corral	16,050	2,675	60	30	132	680
Barn	7,500	1,250	60	30	62	318
Water system	3,540	590	60	20	29	176
Owned Land	420,000	420,000	98	40	6,956	24,737
Vet Equipment	405	65	60	15	1	23
Gooseneck Trailer	7,050	1,155	60	20	17	350
Squeeze	2,020	180	60	10	5	157
<b>Total BUILDINGS, IMPROVEMENTS AND EQUIPMENT</b>	<b>466,565</b>				<b>7,258</b>	<b>26,870</b>
<b>PURCHASED LIVESTOCK</b>						
Bulls	1,500	630	100	6		191
<b>Total PURCHASED LIVESTOCK</b>	<b>1,500</b>					<b>191</b>
<b>RETAINED LIVESTOCK</b>						
	(Beginning Value)				(Int. on investment)	
Cows	40,000	25,000	100			1,300
Replacement Heifers	4,200	3,500	100			154
Bulls	1,500	630	100			43
<b>Total RETAINED LIVESTOCK</b>	<b>45,700</b>					<b>1,497</b>
<b>MACHINERY AND VEHICLES</b>						
Tractor loader	31,200	5,250	60	26	75	1,386
ATV	3,900	390	60	5	283	514
Pickup 4x4 3/4 ton	22,650	2,265	60	5	2,829	2,986
<b>Total MACHINERY AND VEHICLES</b>	<b>57,750</b>				<b>3,187</b>	<b>4,886</b>

<sup>§</sup> The purchase price for buildings, improvements, equipment, machinery, and vehicles is 60% of new cost.

<sup>‡</sup> Salvage value is 10% of new cost.

Table 4.

UC COOPERATIVE EXTENSION  
RANGING ANALYSIS FOR A 50 COW-CALF ORGANIC OPERATION  
NORTH COAST - MENDOCINO AND LAKE COUNTIES  
2005

	Total Head	Weight Lbs	Market Prices									
			\$ per Lb									
Heifer Calves	13	522	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75
Steer Calves	20	522	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75
Cull Cows	7	664	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75
Cull Bulls	0.17	142	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75
Cull Sale Replacement Heifers	3	664	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75
Gross Income			179,176	185,149	191,121	197,094	203,066	209,039	215,011	220,984	226,956	232,929
<b>Operating Costs</b>			<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>	<b>139,825</b>
Net Income Above Operating Costs			39,351	45,323	51,296	57,269	63,241	69,214	75,186	81,159	87,131	93,104
<b>Total Costs</b>			<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>	<b>202,174</b>
Net Income Above Total Costs			-22,998	-17,026	-11,053	-5,080	892	6,865	12,837	18,810	24,782	30,755
Net Income per Cow Head	50	Head	-459.96	-340.51	-221.06	-101.61	17.84	137.29	256.74	376.19	495.64	615.09