UNIVERSITY OF CALIFORNIA - COOPERATIVE EXTENSION

2010

SAMPLE COSTS FOR A

GOATS FOR MEAT

OPERATION

In Northern California

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INTRODUCTION

While the sample costs to raise goats for meat in Northern California are presented in this study, these costs will be useful for others interested in producing goats for meat in other areas. The ranch used in this study is for a meat goat herd that raises, produces, sells live animals, or slaughters, packages, and markets the final meat product during a 12 month cycle. 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 local figures. Practices described are based on those production procedures considered necessary for goats in Northern California 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.

For an explanation of calculations used for the study refer to the Assumptions section. 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 your local UC Cooperative Extension Livestock and Natural Resources Advisor.

ASSUMPTIONS

The following assumptions pertain to sample costs to raise goats for meat in Northern California. Practices described are not necessarily recommendations by the University of California, but represent husbandry, production practices, and materials considered typical of the meat goat herds surveyed. Some costs, practices, and materials may not be applicable to your situation or used during every year. Additional husbandry practices not indicated may be needed. Husbandry practices vary by ranches and region with variations that can be significant. These costs are presented in several formats. *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.*

In this study, producers are raising goats to maximize weight gain for meat sales. Both live animals and packaged meat are sold. A myriad of marketing channels can be utilized and often are. A more detailed discussion of marketing occurs below in the Transportation, Sales, Returns, and Marketing sections. The ranch used in this example uses a majority of leased land and a small adjacent rented headquarters during the winter. Producers currently tend to use many different breeds of goats and while this study does not assume which specific breeds are raised, it assumes the herd will gain weight efficiently. It is important to realize changes in feed, environment, weather, is stressful to goats and can result in death and production loss.

Depending on the situation, individual ranchers may offset feeding in confined areas with fees for grazing. These fees also may attempt to recover herding, pasture-to-pasture transport, labor, fencing, guard dogs and feed costs. They may also absorb the owner labor/management costs, which would boost income. Income (price per head) may be higher than the average prices reported in this study.

This study does not consider any outside income sources or spreading the costs over multiple ranch enterprises. It also states what the higher labor rate would be for the producer if wages were paid as a monthly income. A comparison of cost studies from other states shows little or no labor included in operating costs. In tables 4, 5, and 7 labor is considered to be part of the Returns to Risk and Management.

Land. The hypothetical ranch consists of 300 acres of dryland range that is leased, and 40 acres of contiguously unimproved headquarters dry land pasture that is leased for an annual rate of $4,800. This headquarters property includes dry land pasture, fencing, and facility maintenance. The headquarters includes all of the buildings, permanent corrals, and equipment for working and supplementary feeding of the goat herd. Private range leased in this region averages $16.50 per Animal Unit Month (AUM). It is assumed that a dry doe is 0.17 Animal Unit (AU) (September – November) and a lactating doe is 0.2 AU (March – September). The herd is run on the leased ground except for during the harsher winter months of December, January, and February when they are brought to the homestead, run on the headquarters pasture, and fed alfalfa hay during kidding (approximately 4.0 lbs/head/day).

GOAT HUSBANDRY PRACTICES AND MATERIAL INPUTS

Goat Breeds. There are several breeds of goats that are raised for meat production in Northern California. The most representative breeds are Boers, Kikos, and Boer and Kiko crosses. Other breeds that are used to a lesser degree or crossbreeds include La Mancha, Cashmere, Alpine, and Spanish goats. Other dairy goat breeds, especially male kids are also often used. Boers and Kikos, while normally are more expensive to purchase, will put weight on faster than many other breeds, are well muscled, do well

in tough terrain, and are easy to handle. Crossing Boers and Kikos with other breeds can bring desirable characteristics such as good mothering and other improvements through hybrid vigor. For more information on goat breeds and their distinctive traits an excellent source is the Oklahoma State University Breeds of Livestock Project website (http://www.ansi.okstate.edu/breeds/goats/).

Goat Herd. The herd consists of 157 does, eight bucks, and 255 kids. Death loss is assumed to be 10%, or 28 of all kids born (180% kidding rate or 283 kids born – 28 deaths = 255 live kids). Most marketing will occur in late summer except for 40 kids that will be harvested and sold as meat. Additionally, 30 doelings will be retained to replace 15 does in the breeding herd. From the herd's 30 retained doelings, 15 are kept as replacements. The ranch has 8 bucks to service the herd, and two replaced annually with an outside purchase. In total, 225 male and female kids, 15 doelings, two bucks, and 12 culled does (three died, leaving 12 to market translating to a mature doe death loss of about 3%) are marketed throughout the year.

This goat operation sells weaned kids off the ranch, at auction, and also produces meat. Some ranchers contract out to other landowners to browse down brush and other growth to reduce fire potential. This is not included in this report as either returns or feed. Does and replacement does are bred in late summer through fall (September 1 through 31 (60 day breeding season)). A 180 percent birth rate is used (December through February). Fifteen herd does will be culled from the herd for various reasons.

The goat herd operates on a yearly basis. Approximate dates for ranching operations are shown in Table 1. Bucks and culled does are normally sold through commercial auction markets. Most kids will be marketed at six to eight months of age off the farm in September and October. Forty of the smaller or later born kids are held over until November to be harvested in a USDA processing facility and sold as meat.

Table 1. Months of major operations

Operation	Month	To	Month
Winter Feeding	January	-	March
Pasture Feeding	March	-	December
Kidding	February	-	March
Breeding	September 1	-	October 31
Weaning	September	-	October
Meat Sale [§]	Varies		

[§] For meat sale calendar see Table 8.

Suitable replacement doelings are selected at weaning and 30 doelings are exposed to bucks and retained through the breeding season. After the breeding season, replacement doelings are again evaluated, with the top 15 selected as replacements and moved into the regular herd. The remaining 15 are marketed at the local auction.

Feed. Lactating does are run on rented dryland range during the spring and early summer. Dry does are also run on rented dryland range during the summer and fall. Does are moved from the rented dryland range to the headquarters from January to March and fed supplementary forage (approximately 4 lbs/head/day). Bucks are kept on the headquarters pasture year-round except for September 1 through October 31, when they are turned out onto the rented rangeland to breed the does.

Feeding goats and monitoring kidding during the winter months requires the largest amount of labor. Feeding is required because of the limited forage on the headquarters pasture, lack of rented rangeland shelter, and easier monitoring of kidding. Does are supplemented with alfalfa hay at a rate of 4.0 pound per day for this 90 day period. The bucks are fed 5.0 pounds/head/day for the ten month period (except for the 60 day breeding period when they are turned out on the does on the rented pasture.

Animals are also fed a mineral supplement/salt mixture to ensure they receive proper nutrition. It is assumed that goats use 0.2 ounces of mineral supplement per head per day.

Fencing. The ranch has permanent and temporary fencing. The permanent fences are assumed to be in place on the boundaries of the farmstead. Maintenance of permanent fences on the leased land is included in the lease fee.

Temporary fences are electric and moved as needed. Electric fences are owned and considered an investment to the owner and a capital recovery cost is shown in various tables to account for its value.

The costs for labor to move goats will depend on the pasture design, whether using a herd dog, terrain, and distance traveled to herd. Because the leased rangeland is 300 acres, the herd is moved within the confines of the range to maintain uniform consumption of forage.

Vaccination/Veterinarian Care. All kids and does are vaccinated, dewormed, and castrated according to standard protocols. All animals are given routine vaccinations with costs attributed to doe costs at $4.00 per head annually.

MARKETING, SALES, RETURNS, AND TRANSPORTATION

Marketing. The ranches that were studied for the foundations of their costs of a hypothetical ranch used three types of marketing: direct sales of live animals at the ranch, sale of cut and wrapped meat (at a Farmer's Market) and sale of culled animals at auction. None of these marketing channels are explored in depth in this cost study because information regarding goat markets is still developing and standard sales practices are still uncertain. With a meat goat operation, different marketing methods should be considered to sell goats. Marketing costs (advertising, promotion, Farmer's Market expenses etc) are estimated at $3,600. It is essential producers explore markets and sales to find the best practice for their business. This may mean using several sales strategies to achieve profitability and economic sustainability. The holidays and approximate weight/size that different consumers want are listed in Appendices 1 and 2.

Sales and Returns. In this study the majority of off the farm live animal sales occur directly after weaning (August/September). This timing also meets the demands for several ethnic holiday markets. Off farm sales of weaned kids totals 185 head (108 male, 77 female). Forty weaned kids (20 male, 20 female) at 7-8 months of age (September – October), are harvested through a USDA processing facility and sold as meat throughout winter and spring. The 15 doelings that are not kept as replacements are marketed just after the breeding season in November through the local auction market. Two cull bucks (November) and 12 cull does (March) are sold each year through the local auction market. Table 2 outlines the disposition of market livestock.

Table 2. Type of livestock sold

Class/Type	Type of Sale	Number
Kids	By the head, off ranch	185
Kids	Marketed in the meat	40
Cull doelings	Sale barn	15
Cull does	Sale barn	12
Cull bucks	Sale barn	2
Total animals marketed		254

Because some of the animals are sold directly to the buyer live or processed into various cuts of meat to be sold directly to the consumer, there is a difference in price determination. A price per head on live animals is what many producers use to reduce price bargaining. That price will vary by the type of animal, size/weight, age, and demand and are shown in Table 3. In this study, an average price of $103.79 per head for all goats sold live is used. However, when animals are taken to a processing plant for packaging the meat cuts are normally sold by weight. In this study, an average price of $6.56 per

pound for all goat meat is used. Kids are shipped for slaughtering and butchering once they reach proper weight in late October or early November.

Transportation Cost. The rancher uses their own pickup-truck and trailer to ship live animals that will be sold as a meat product. This is assumed to be a two-hour trip to deliver animals for slaughtering, cutting, and wrapping in a USDA inspected and certified plant. Transportation costs that include fuel are paid by the rancher. The rancher has to remember to include these transportation costs in the final meat product. While transportation of the animals is required, shrinkage does not cause a significant weight loss of the animals.

Table 3. Value received by class of goat sold

Sales	Sex	Unit	Lbs/Head	# of Head	$/Unit	Total
Kids-Ranch	Males	Head	NA	88	100	$8,800
	Females	Head	NA	97	125	$12,125
Doelings		Head	NA	15	100	$1,500
Cull Does		Head	NA	12	40	$480
Cull Buck		Head	NA	2	50	$50
Meat	Males	Lbs	25	38	7.00	$6,650
	Doelings	Lbs	57	5	2.50	$712.50
Total Income from Sales						$30,316.50

Vehicle/Freight. Pickup-truck 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 1,500 miles per year.

Packaging & Labeling. In this study packaged meat makes up only 15% of total sold animals. Packaged goat meat is assumed to be 30% of live weight. In reality the live-weight-to-packaged meat ratio will vary depending on the size of the animal, grade, gender, breed and other factors. The cut meat is hermetically sealed at butchering, labeled, and frozen to maintain sanitation and shelf life as well as make shipping possible. The harvesting, processing, packaging and labeling are paid for by the rancher. Ranchers provide the labels (USDA approved), at their own expense, to the processor. Ranchers selling their cuts, either directly to consumers or retail, have freezer storage on their ranch in order to hold meat as long as needed.

Risk. The risks associated with a 157 doe operation; producing and marketing goat meat is 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 meat goat operation. A market channel must be determined before starting a meat goat operation.

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 owned 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 5.75% per year. A nominal interest rate is the typical rate for borrowed funds.

Management. Wages for owner labor are not included in this study nor are earnings paid for monthly living expenses. No assumption is made about off-farm income. Any return above total costs is considered a return to management and risk.

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 0.820% of the average value of the assets over their useful life. Liability insurance covers accidents on the farm.

Business Expense. Office and business expenses are estimated at $1,000 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 $2.04 and $2.67 per gallon, respectively.

NON-CASH OVERHEAD COSTS

The cost calculations are based on economic principles that include all cash costs. This analysis uses a lease value based on the AUMs the rangeland can carry as a cost of operating. For this reason only the capital recovery costs for the owned land, machinery, equipment, fence, and building are considered in the non-cash overhead cost.

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 50% 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:

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

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 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 4.75% is used to calculate capital recovery cost is the effective long term interest rate in January 2010. The interest rate is provided by a local farm lending agency and will vary according to risk and amount of loan. 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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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, 530-752-6887, or obtained from the local county UC Cooperative Extension offices. Some archived studies are also available on the website.

For information concerning the above or other University of California publications, contact UC DANR Communications Services at 800-994-8849, online at http://anrcatalog.ucdavis.edu/InOrder/Shop/Shop.asp, or your local county UC Cooperative Extension office.

Table 4. UC COOPERATIVE EXTENSION
COSTS PER HEAD TO MAINTAIN A 157 HEAD GOAT OPERATION
NORTHERN CALIFORNIA
2010

	Unit Each	Unit	Total Number of Head or Units Sold	Price or Cost/Unit	Total Value	Value or Cost/Doe	Your Cost
GROSS RECEIPTS							
Cull Does - Farm/Auction Sales	1	Head	12	40	480	3.06	
Kids - Male - Farm/Auction Sales	1	Head	88	100	8,800	56.05	
Kids - Female - Farm/Auction Sales	1	Head	97	125	12,125	77.23	
Cull Bucks Farm/Auction Sales	1	Head	2	25	50	0.32	
Cull Doelings - Farm/Auction Sales	1	Head	15	100	1,500	9.55	
Kids - Male - Packaged Meat	25	Lb	38	7.00	6,650	42.36	
Cull Doelings - Packaged Meat	57	Lb	5	2.50	713	4.54	
TOTAL RECEIPTS					**30,317.50**	**193.11**	
OPERATING COSTS							
Alfalfa Hay		Lb	64,000	0.06	3,840	24.46	
Minerals		Lb	2,021	0.16	323	2.06	
Grazing Land		AUM	314	19.80	6,265	39.91	
Processing & Transportation Costs		Head	38	40.80	1,550	9.88	
Headquarter Rent		Tract	1	4,800.00	4,800	30.57	
Purchased Bucks		Head	2	400.00	800.00	5.10	
Marketing Costs		Ranch	1	3,600.00	3,600	22.93	
Veterinary Medicine		$	603	1.00	603	3.84	
Machinery (fuel, oil, lube, repair)		$	74	1.00	74	0.47	
Vehicles (fuel, lube, repair)		$	1,777	1.00	1,777	11.32	
Equipment (repair)		$	447	1.00	447	2.85	
Interest on Operating Capital		$	8,796	5.75%	506	3.22	
TOTAL OPERATING COSTS					**24,586**	**156.61**	
INCOME ABOVE OPERATING COSTS					**5,732**	**36.50**	
CASH OVERHEAD							
Taxes and Insurance		$			321	2.05	
Overhead		$			1,000	6.37	
TOTAL CASH OVERHEAD COSTS					**1,321**	**8.42**	
NON-CASH OVERHEAD COSTS							
Capital Recovery		$			3,524	22.45	
Interest on Retained Livestock		$			1,170	7.45	
NON-CASH OVERHEAD COSTS					**4,694**	**$29.90**	
TOTAL COSTS					**30,601**	**$194.93**	
Returns to Risk and Management					**-283**	**-$1.82**	

UC COOPERATIVE EXTENSION

Table 5. MONTHLY SUMMARY OF CASH RETURNS AND EXPENSES TO MAINTAIN A 157 HEAD GOAT OPERATION
NORTHERN CALIFORNIA
2010

	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10	Jul 10	Aug 10	Sep 10	Oct 10	Nov 10	Dec 10	Total
PRODUCTION													
Cull Does - Farm/Auction Sales	0	0	0	200	0	0	0	0	0	80	200	0	480
Kids - Male - Farm/Auction Sales	0	0	0	200	200	100	0	100	400	7,300	500	0	8,800
Kids - Female - Farm/Auction Sales	0	0	0	875	500	250	375	250	250	9,250	375	0	12,125
Cull Bucks Farm/Auction Sales	0	0	0	0	0	0	0	0	0	25	25	0	50
Cull Doelings - Farm/Auction Sales	200	300	300	100	100	0	0	0	0	200	300	0	1,500
Kids - Male - Packaged Meat	1,050	1,050	1,225	1,050	1,050	0	0	0	0	0	1,225	0	6,650
Cull Doelings - Packaged Meat	0	143	285	143	143	0	0	0	0	0	0	0	713
TOTAL RECEIPTS	**1,250**	**1,493**	**1,810**	**2,568**	**1,993**	**350**	**375**	**350**	**650**	**16,855**	**2,625**	**0**	**30,318**
OPERATING INPUTS													
Alfalfa Hay	941	941	1,030	0	0	0	0	0	0	0	0	928	3,840
Minerals	17	17	22	26	30	34	40	43	43	17	17	17	323
Grazing Land	0	0	0	865	865	865	865	686	687	702	730	0	6,265
Marketing Costs	0	0	0	0	0	0	0	0	0	0	0	0	0
Processing & Transportation Costs	0	0	0	0	0	0	775	775	0	0	0	0	1,550
Headquarter Rent	0	0	0	0	0	0	0	0	0	0	0	0	0
Veterinary Medicine	0	0	0	288	64	0	0	0	0	0	0	0	352
Machinery (Fuel, Oil, Lube, Repair)	74	0	0	0	0	0	0	0	0	0	0	0	74
Vehicles (Fuel and Repair)	759	758	26	26	26	26	26	26	26	26	26	26	1,777
Equipment (Repair)	0	0	0	0	224	224	0	0	0	0	0	0	447
Taxes and Insurance	0	0	0	16	0	0	0	0	0	16	0	0	31
Purchased Bucks	0	0	0	0	0	0	0	800	0	0	0	0	800
TOTAL OPERATING COSTS	**1,791**	**1,717**	**1,078**	**1,220**	**1,209**	**1,149**	**1,706**	**2,330**	**756**	**761**	**773**	**971**	**15,461**
NET RETURNS	**-541**	**-224**	**732**	**1,347**	**784**	**-799**	**-1,331**	**-1,980**	**-106**	**16,094**	**1,852**	**-971**	**14,857**
OPERATING INTEREST													
Cumulative Operating Cost	**1,791**	**3,508**	**4,585**	**5,805**	**7,014**	**8,163**	**9,869**	**12,199**	**12,955**	**13,716**	**14,489**	**15,461**	
Interest on Operating Expenses	**9**	**17**	**22**	**28**	**34**	**39**	**47**	**58**	**62**	**66**	**69**	**74**	**525**

UC COOPERATIVE EXTENSION

Table 6. INVESTMENT SUMMARY OF MAINTAINING A 157 HEAD GOAT OPERATION
NORTHERN CALIFORNIA
2010

	Purchase Price [§]	Salvage/Cull Value [‡]	Livestock Share (%)	Useful Life (yr)	Annual Taxes and Insurance	Interest	Annual Capital Recovery
Buildings, Improvements, and Equipment							
Veterinary Equipment	237	0	42	15	0		9
Trailer	6,089	609	42	10	6		307
Electric Fencing	2,550	255	42	10	2		128
TOTAL BUILDINGS, IMPROVEMENTS AND EQUIPMENT	**8,876**				**9**		**444**
PURCHASED LIVESTOCK							
Bucks -2	800	25	100	4			147
Guard Dogs	800	0	100	6			156
TOTAL PURCHASED LIVESTOCK	**1,600**						**303**
RETAINED LIVESTOCK	**(Beginning Value)**					**(Int. on investment)**	
Does	23,550	25,905	100			1,175	
Bucks	3,200	200	100			81	
TOTAL RETAINED LIVESTOCK	**26,750**					**1,255**	
MACHINERY AND VEHICLES							
Pickup 4x4 3/4 ton	16,000	1,600	47	10	209		892
ATV - 4WD	5,000	500	47	1	104		2,188
TOTAL MACHINERY AND VEHICLES	**21,111**				**313**		**3,080**

[§] The purchase price for buildings, improvements, equipment, machinery, and vehicles is the new cost.

[‡] Salvage value is 10% of new cost except for veterinary equipment, bucks, and guard dogs.

Table 7.

UC COOPERATIVE EXTENSION
RANGING ANALYSIS FOR A 157 HEAD GOAT OPERATION
NORTHERN CALIFORNIA
2010

	Total Units Head	Costs and Returns Number of Head Sold						
Total Sale Animals (Head)	214	184	194	204	214	224	234	244
Total Packaged Meat Sales (Lb)		1,062	1,120	1,177	1,235	1,293	1,350	1,408
Gross Income		**21,714**	**24,424**	**27,292**	**30,318**	**33,500**	**36,841**	**40,340**
Total Operating Costs		21,139	22,288	23,437	24,586	25,735	26,883	28,032
Net Income Above Operating Costs		**575**	**2,136**	**3,855**	**5,732**	**7,766**	**9,958**	**12,307**
Total Cash Overhead Costs		1,321	1,321	1,321	1,321	1,321	1,321	1,321
Net Income Above Total Cash Costs		**-746**	**815**	**2,534**	**4,411**	**6,445**	**8,637**	**10,986**
Non-cash Overhead Costs		4,694	4,694	4,694	4,694	4,694	4,694	4,694
Total Costs		27,154	28,303	29,452	30,601	31,750	32,899	34,047
Net Income Above Total Costs		**-5,440**	**-3,879**	**-2,160**	**-283**	**1,751**	**3,943**	**6,292**
Net Income per Doe	**157**	**-34.65**	**-24.71**	**-13.76**	**-1.80**	**11.15**	**25.11**	**40.08**

RETURNS ABOVE TOTAL OPERATING COSTS FOR MEAT GOATS

Meat Sales		Number Sold Head & Pounds of Meat						
$/Head [§]		184	194	204	214	224	234	244
	$/Lb [§]	1,062	1,120	1,177	1,235	1,293	1,350	1,408
88.79	5.06	575	607	638	669	700	732	763
93.79	5.56	2,026	2,136	2,247	2,357	2,467	2,577	2,687
98.79	6.06	3,477	3,666	3,855	4,044	4,233	4,422	4,611
103.79	6.56	4,928	5,196	5,464	5,732	5,999	6,267	6,535
108.79	7.06	6,379	6,726	7,072	7,419	7,766	8,113	8,459
113.79	7.56	7,830	8,256	8,681	9,107	9,532	9,958	10,383
118.79	8.06	9,281	9,785	10,290	10,794	11,299	11,803	12,307

[§] The prices and weights used are weighted averages for class 1 goats sold.

RETURNS ABOVE TOTAL CASH COSTS FOR MEAT GOATS

Meat Sales		Number Sold Head & Pounds of Meat						
$/Head [§]		184	194	204	214	224	234	244
	$/Lb [§]	1,062	1,120	1,177	1,235	1,293	1,350	1,408
88.79	5.06	-746	-714	-683	-652	-621	-589	-558
93.79	5.56	705	815	926	1,036	1,146	1,256	1,366
98.79	6.06	2,156	2,345	2,534	2,723	2,912	3,101	3,290
103.79	6.56	3,607	3,875	4,143	4,411	4,678	4,946	5,214
108.79	7.06	5,058	5,405	5,751	6,098	6,445	6,792	7,138
113.79	7.56	6,509	6,935	7,360	7,786	8,211	8,637	9,062
118.79	8.06	7,960	8,464	8,969	9,473	9,978	10,482	10,986

[§] The prices and weights used are weighted averages for class 1 goats sold.

RETURNS ABOVE TOTAL COSTS FOR MEAT GOATS

Meat Sales		Number Sold Head & Pounds of Meat						
$/Head [§]		184	194	204	214	224	234	244
	$/Lb [§]	1,062	1,120	1,177	1,235	1,293	1,350	1,408
88.79	5.06	-5,440	-5,408	-5,377	-5,346	-5,315	-5,283	-5,252
93.79	5.56	-3,989	-3,879	-3,769	-3,658	-3,548	-3,438	-3,328
98.79	6.06	-2,538	-2,349	-2,160	-1,971	-1,782	-1,593	-1,404
103.79	6.56	-1,087	-819	-551	-283	-16	252	520
108.79	7.06	364	711	1,057	1,404	1,751	2,097	2,444
113.79	7.56	1,815	2,240	2,666	3,092	3,517	3,943	4,368
118.79	8.06	3,266	3,770	4,275	4,779	5,283	5,788	6,292

[§] The prices and weights used are weighted averages for class 1 goats sold.

APPENDIX A

Table 8. Ethnic Holidays for 2009 – 2013

Holiday	2009	2010	2011	2012	2013
New Year's Day	1/1	1/1	1/1	1/1	1/1
Epiphany	1/6	1/6	1/6	1/6	1/6
Mawlid al-Nabi – Prophet's Birthday	3/9	2/26	2/15	2/4	1/24
Passover/Pesach	4/9 - 16	3/30 - 4/5	4/19 - 25	4/7 - 14	3/26 – 4/1
Western Roman Easter	4/12	4/4	4/24	4/8	3/31
Eastern Orthodox Easter	4/19	4/4	4/24	4/15	5/5
Cinco de Mayo	5/5	5/5	5/5	5/5	5/5
Independence Day	7/4	7/4	7/4	7/4	7/4
Start of Ramadan – Month of Fasting	8/22	8/11	8/1	7/21	7/10
Eid ul-Fitr – Festival of Fast Breaking	9/20	9/10	8/31	8/19	8/9
Rosh Hashanah	9/19	9/9	9/29	9/17	9/5
Navadurgara/Navratra Dashara/Dassai	9/19 - 27	10/8 - 16	9/29 - 10/7	10/16 - 24	10/5 - 13
Diwali	10/17	11/5	10/26	11/13	11/3
Eidul-Adha Festival of Sacrifice	11/27	11/17	10/7	10/26	10/16
Muharramn – Islamic New Year	----	12/7	11/27	11/15	11/5
Chanukkah	12/12 - 19	12/2 - 9	12/21 - 28	12/9 - 16	11/28 - 12/5
Christmas	12/25	12/25	12/25	12/25	12/25

APPENDIX B

Table 9. Goat Sizes and Needs for Ethnic Markets[§].

Holiday	Goat Marketing Requirements
New Year's Day	No requirements mentioned.
Epiphany	Producers need to aim for milk fed kids weighing as little as 18 lbs. for the Epiphany markets.
Eidul-Adha Festival of Sacrifice	Goats 45 to 120 lbs. with 60 lbs. considered optimum. Must meet Halaal conditions.
Muharramn – Islamic New Year	Male or female kids no older than 12 months. Optimum live weight is about 60 lbs, but kids from 45 - 120 lbs. are acceptable.
Mawlid al-Nabi – Prophet's Birthday	No requirements mentioned.
Western Roman Easter	Milk-fed kids 3 months old or younger weighing from 20 to 50 lbs. with 30 lbs. considered optimum.
Eastern Orthodox Easter	Similar requirements as goats for Roman Easter, but 35 lb. kids preferred.
Cinco de Mayo	15 to 30 lb. live weight suckling kids
Independence Day	20 to 35 lbs., but older kids are also acceptable.
Start of Ramadan – Month of Fasting	Yearlings, blemish-free. No open cuts, broken horns, or ripped ears. Castrated animals or with docked tails may be rejected.
Diwali	Mainly tender goats. Weaned, market kids or yearling wethers.
Eid ul-Fitr – Festival of Fast Breaking	The same requirements as Ramadan.
Passover/Pesach	Milk-fed kids for Passover are similar to Easter market.
Rosh Hashanah	No requirements mentioned.
Navadurgara/Navratra Dashara/Dassai	Mainly tender, but only male goats. Weaned, market kids or yearling wethers.
Chanukkah	Breed out of season in May for October kidding.
Christmas	Same as Epiphany market.

[§]At the time this document was printed it reflected the best information available. Before targeting a particular market, it is recommended that it be researched thoroughly to make sure what you are producing will meet the needs of that particular market.